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PAMPHLETS

ON

NAVAL SUBJECTS,

BY

VICE-ADMIRAL BOWLES.

LONDON:

JAMES RIDGWAY, PICCADILLY.

1854.

231. c. 1.



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PREFACE.

London, Jan. 24, 1854.

PROBABLY many of those who may feel disposed to favour these pages with a perusal, are already aware that I have on various occasions, during the last thirty years, endeavoured to awaken the attention of the Government and the Country to those defects in our Naval Administration which appeared to me to require immediate amendment.

Most of these publications are now out of print, and perhaps forgotten, but as when taken collectively they furnish a sort of historical sketch of the state of the British Navy from the peace of 1815 to the present period, I have thought that their republication, chronologically arranged, might not be uninteresting to those who are aware of the importance of the subject, and especially to the officers of my own Profession, who are best able to form a correct opinion upon it.

At this moment also when the Nation, awakened from its long and dangerous lethargy, is watching with anxiety and alarm our slow and tardy preparations, and looking back with wonder, and something like incredulity, at the rapidity and energy

with which our formidable fleets were equipped half a century ago,* it may be useful to point out the causes which are thus impeding our armaments, and the development of our national strength.

It will be seen that my first observations were directed towards that which at the moment appeared the most pressing danger—namely, the inferiority of many of our ships to those of other Maritime Nations in size and force; but I soon afterwards took every opportunity of calling attention to the equally important question of manning the Navy, and of having always a considerable Reserve of Seamen ready against any emergency. As time drew on, and it became yearly more and more evident that our method of manning our fleets by impressment could no longer be relied on, I more urgently pressed on the consideration of the Government the necessity of some great and comprehensive measure to supply this deficiency; and it will be seen by a paper in the Appendix, that in July, 1852, a proposition was sent to the Admiralty by Sir T. Hastings and myself, sketching out the plan which I will now endeavour to explain more clearly and minutely.

Since that time, however, most important information has been obtained by the publication of the proceedings of the Commission of Naval Enquiry appointed by the French Government in 1850, and in which all the arrangements in force in that

* See Appendix, page xix.

country for the rapid equipment of their whole fleet are fully detailed. The Commission in question directed one of its most talented members to draw up for their information a complete report on this subject, and the following abstract of its contents will be found highly interesting and instructive.

Abstract of M. LANJUINAIS' Report "Sur l'Inscription Maritime," (Enquête Parlementaire, vol. i. p. 243.)

HE commences by asserting that the defence of the country is the duty of every citizen. All may be lawfully called on for this purpose, to serve either by land or sea, but circumstances render it much more difficult to obtain seamen than soldiers. Every strong and healthy young man is fit for the army, but it requires an early training to make a sailor, and they can consequently only be obtained from that class of the population, which, from its earliest youth, has devoted itself to the sea. The result has been, that the number of men required for the fleet so nearly equals that of the whole maritime population of France, that it has been found necessary to impose the condition of compulsory service on the entire class, and during the whole of their active life.

Every seafaring man (and this term is taken in its widest acceptation*), is inscribed on the lists of

* Including all mechanics and persons connected with steam machinery.

his "arrondissement" at the age of eighteen, and is from that time forward placed under the "surveillance" of the Commissary of his district, which he cannot leave without permission, and no man can be engaged on board any merchant ship who does not produce a certificate of this description. In short, without going into minute particulars, every seafaring man in France is considered the property of the State until he reaches the age of forty-five, and, after serving in the first instance six years on board a ship of war, is liable to be again called out whenever the Government consider the circumstances of the country require any large augmentation of the naval force.

The number of men who have thus received a considerable amount of training and discipline is variously stated, but no calculation laid before the "Enquête Parlementaire" places it below 40,000, in addition to those actually now serving afloat, and a confident expectation is expressed by the Commission that this will suffice to man rapidly their whole effective fleet, consisting, according to the present establishment, of

45 Ships of the Line,
40 Frigates,
50 Corvettes,
80 Smaller vessels,
20 Transports ;

and he observes triumphantly, "this is more than England will be able to do now that impressment is given up."

It will be seen by the foregoing sketch, that nothing can be more carefully arranged or more complete than these regulations, and there can be no doubt that the object for which they have been framed—the rapid equipment of the entire French Navy,—has been fully attained, and that within two months the whole of this formidable force (nearly one half of which is now in commission) would be ready for sea. It therefore behoves those to whom the management of affairs is committed in this country, to consider to what extent any similar arrangements are matured here, and whether, if they are still neglected or postponed, the whole weight of public indignation may not justly be directed against those who have been capable of sacrificing the National safety and its vital interests to party and political considerations.

The immense amount of our maritime population, and the magnitude of our Mercantile Marine, happily render severe and arbitrary measures wholly unnecessary; but an energetic organization is not the less required for the accomplishment of our object, because it is easy. Let us only look back on the occurrences which preceded the re-establishment of the Militia two years ago. The Government of that day seemed to have assumed that all public spirit and patriotism were become extinct. They suffered the laws which provided for the maintenance and training of this

important force to fall into desuetude, and when at last pressed by public opinion to do something which might look like preparation, a measure was brought forward, so obviously inefficient and unsuitable to the occasion, that the Government was overthrown on the first night of its discussion.

And what followed? the old Militia laws, with such alterations and improvements as the change of circumstances rendered advisable, were re-enacted by very large majorities, and without exciting the slightest discontent; in a very short time the required number of men was obtained by voluntary enrolment, without in any instance having recourse to the Ballot, and it is most gratifying to observe that the conduct of these young soldiers has been uniformly creditable and praiseworthy, and that they are already rapidly advancing in discipline and efficiency.

Does not this remarkable occurrence clearly prove that our population is as ready and willing to come forward for the defence of the country as at any former period of our history, and that it will respond as cheerfully as ever to any call for its services? but they will be of no avail without previous organization and arrangement, and it is to these indispensable measures that I am now to entreat the serious consideration of my readers.

I propose, in the first instance, to exempt the

whole line of the Coast of the United Kingdom, within five miles of the Sea from the Ballot for the Militia, and to substitute service afloat instead. If the Census of 1851 does not furnish the requisite *data* for this purpose, the necessary measures should be taken for the preparation of such lists (on the exact principle of the Militia) as may provide the Government with all the information which it will require for this purpose, and the numbers liable to be called out being once known, their division into classes, and the conditions of their service would be the next points for consideration.

On a subject of such magnitude and importance, much deliberation must obviously be necessary, but it seems clear that the rapid manning of our Fleet is the first object in view, to which all others should be subordinate. I therefore propose that the First Class, consisting of those from 18 to 30, should be made available for service in the Royal Navy for a certain fixed period, and liable to be called out during the period of their enrolment in a manner as nearly analogous to the Militia, as the difference of circumstances would admit, but with equal bounties and advantages, as well as subsequent exemptions.

The Second Class would consist of married men, with families, or between 30 and 40, and would be liable to limited service within the United Kingdom, in the same manner as the Militia; and the Third Class (if a Third Class shall be found necessary)

should be only required to serve in their own immediate locality, in such a manner as any extraordinary emergency might render necessary.

This measure (of which I am fully aware I am giving but a hasty and imperfect sketch) would however be very incomplete if it stopped here—It only applies to what may be termed the *sedentary* part of our Maritime population, and does not include that large and invaluable body of men serving on board our Ships, employed in Foreign trade, and to whom from their migratory habits and uncertain return from long voyages, no machinery analogous to our Militia regulations could be easily devised.

I therefore propose to place all our large Seaport towns on the footing of Counties, and to assess them at certain *quotas* in proportion to the number of Ships and Seamen employed; but as a large proportion of these Seamen would necessarily be absent at any given time, the contingent might be furnished monthly or quarterly in such numbers as may be decided on until it was complete, the levies being only liable to five years' service, and placed in all other respects in a condition as nearly as possible similar to the Militia.

It is obviously out of my power in a rough outline of this description to offer any conjecture, with respect to the number of men obtainable under these proposed regulations—I am however fully convinced it would be sufficient for all our wants, and being of course in addition to those raised by voluntary

enlistment for longer terms of service, would enable the Government to keep our Home Squadron always complete, and prevent the continuance of the present objectionable system of having a considerable number of ships in commission at a heavy expense, but wholly ineffective for want of men.

I cannot think that this measure, which it must always be recollected is a compromise between the State and its Subjects for the abandonment of a far more stringent and obnoxious system, will be found to press with any undue severity on the Maritime Districts or Seaport Towns.

The numbers required will bear a very small proportion to that of the population from which they are taken. The term of service will be a short one; and their subsequent exemption complete, and there can I think be little doubt that if the power of the Ballot is retained, and it becomes known that compulsory measures must be resorted to if Volunteers do not come forward, we shall soon see our young seamen manifesting the same alacrity which we have witnessed with so much pleasure in the Militia.

The prejudices and erroneous ideas with respect to the Royal Navy, which now too generally prevail, would be dispelled on a closer acquaintance with it, and a much larger number of entries for extended service gradually obtained.

I will not detain my readers by anticipating objections to the measure I venture to propose.

Doubtless abundance of them may be urged, but I will only request those who disapprove of my suggestions to bring forward something equally practical, and to consider seriously the extreme danger of our present situation, having virtually abandoned the system by which our fleets were formerly equipped with such wonderful celerity, without at the same time providing any adequate substitute for it.

The existing generation in this country, nurtured in peace and tranquillity, and ignorant of the dangers and calamities of war, possesses, I fear, but a very feeble and imperfect idea of the extreme peril of our present situation. They entertain a vague notion that on any sudden emergency the Country would again put forth its strength as it was formerly accustomed to do, and forget that "*its locks are shorn,*" and that those powers no longer exist which enabled us towards the conclusion of the last century to avert war on three several occasions (1787, 1790 and 1791) by the rapidity and completeness of our Naval preparations,* and afterwards when we were unexpectedly forced into hostilities in 1798, proved so effective, that we increased our number of Seamen from 16,000 to 80,000 within twelvemonths, and our Ships of the Line from 20 to 75.

These exertions contrast very unfavourably with our present situation. Although the political

* See Appendix, page xix.

horizon was sufficiently cloudy early last year, and the necessity of a formidable armament must have been clearly seen, we have only been able to raise 5000 or 6000 men during that time, while our preparations for a war, in which we shall be opposed to two large and very respectable Russian fleets, well-exercised and disciplined (as the action at Sinope fully proves), very little resemble those to which I have just referred.

It must therefore, I think, be apparent to all those who will consider the question calmly and carefully, that our present absence of all system and arrangement with respect to the manner in which our Fleets are to be manned on any sudden emergency should no longer continue; and that having already without the least real difficulty reorganized our Regular Militia, no reason exists against our extending and adopting similar measures for the equipment of our Fleets. A Naval Militia taken from the Maritime population of the United Kingdom, and raised on precisely the same conditions, must surely be equally Constitutional, and would, I am firmly persuaded, be found fully effectual and sufficiently popular.

The arrangements for raising men would proceed in the manner already enacted by the laws regulating the enrolment of the Militia—the exemptions, provisions with respect to substitutes, limitations of service, bounties, encouragements and penalties would be as nearly as possible identical. The Coast

would be divided into Districts similar to those now assigned to the Coast Guard. The Deputy Lieutenants would superintend the proceedings in the usual manner with the assistance of the Coast Guard and Constabulary, while in the great Seaports an analogous machinery might be provided by appointing the principal Merchants and Shipowners Deputy Lieutenants, armed with sufficient compulsory power in case of need.

I will not unnecessarily detain my readers with further arguments or tedious details. If I can obtain their attention, I can hardly doubt their assent. They must all see that our present situation is neither creditable or satisfactory—that without the assistance of France we have no fleets prepared at all equal to cope with those of Russia either in the Baltic or the Black Sea, and that we ought especially to avoid the fatal error of despising our adversary. Those who last year saw the Baltic fleet of twenty-eight sail of the line, besides frigates and smaller vessels, speak very highly of its manoeuvres, discipline, and artillery practice. The crews have been together many years, and the Emperor generally superintends their summer exercise himself, rewarding those who distinguish themselves with immediate promotion.

I hope it will be clearly understood that I claim no originality for these suggestions. The subject has been (as was natural) so often and so earnestly discussed, that it is very probable similar proposi-

tions may be found in other publications as well as in my own preceding ones, and I have only endeavoured on the present occasion to lay before the Government and my countrymen in general a more complete and practical scheme than (as far as I am aware) has been hitherto offered for their consideration.

Let me entreat all those who are in the possession of power or influence to consider, as it is their duty to do, the extreme importance of the question before them. It is one on which the National honour, the National safety, and perhaps even the National existence depends, and most deep and awful will be the responsibility of those who at such a moment of danger and difficulty are capable of disregarding or postponing it for the sake of other measures infinitely inferior in importance, and which although merely intended to secure political predominance, must inevitably produce much domestic discord, dissatisfaction and weakness, at a crisis when everything depends on public spirit and unanimity.

APPENDIX.

London, July 30th, 1852.

SIR,

HAVING understood that a Committee of Officers has been nominated for the purpose of considering and reporting on the best mode of manning H.M. Navy, and having ourselves on various occasions offered suggestions on this important subject, we feel it our duty again to lay before their Lordships at this moment a general recapitulation of our joint opinions, and the propositions which after a very careful reconsideration of the whole matter appear to us best adapted to meet the difficulties and dangers so generally allowed to exist.

We have the honor, &c.

WILLIAM BOWLES, *Vice-Admiral.*

THOMAS HASTINGS, *Captain.*

The Secretary of the Admiralty.

SUGGESTIONS, ETC.

IN considering a great question of such vital importance, both to the safety of the empire, and to the maintenance of that Maritime superiority which has hitherto formed the foundation and support of our National power and pre-eminence, it is advisable to inquire in the first instance under what arrangements the Governments of the last century were enabled on any alarm or apprehension of war to equip with a rapidity which will perhaps appear incredible to the present generation, an armament so formidable as not only fully to provide for our security at home, but for the defence and protection of our Colonies and Commerce. Without going further back in our Naval History than the years 1787, 1790 and 1791, we may refer to the armaments of those dates for a sufficient corroboration of our assertions, and it is we believe generally understood that hostilities were in all these cases averted by the rapidity and completeness of our preparations. The records of the Admiralty will furnish the Committee with the full detail of these occurrences, but we can state on the authority of the Admiral of the Fleet, Sir Byam Martin, that in 1790 the press-warrants were issued on the 5th May. In June, Admiral Barrington (with whom he was serving) sailed with the first division of the fleet for Torbay, Lord Howe very soon followed, and after a good deal of exercising in Torbay, the fleet was off Brest in August, consisting of 31 sail of the line, 9 frigates, and 4 sloops. Five sail of the line had been previously detached to Barbadoes, and 23 more were in a forward state of equipment at the different ports.

He adds, that on the three occasions to which we have referred, "the men generally speaking were raised by impressment, and that by no other means could we have made so prompt and so gigantic a display of our Naval strength." At that time impressment existed in its full vigour and energy, and it was by such means alone that the Naval Administration of the day was enabled, with much inferior arrangements and facilities in many other respects, to make these extraordinary exertions. We are, however, far from recommending a return to a system which has become at variance with the increasing civilization and feelings of the age in which we live, but it is nevertheless obvious that if we relinquish a resource on which the security as well as the honour of the country has hitherto depended, without providing a sufficient substitute, we shall fail in one of our most important duties, and incur an awful responsibility.

The tendency of the present generation is too much towards ignoring danger of which they have happily had no experience, and against which it is troublesome or expensive to provide; but it becomes those who govern this great nation to view the question of its defences with a more enlarged and statesmanlike eye, to reflect that the dangers over which we have hitherto triumphed still continue to exist, and that the improved organization which the other great maritime powers have adopted, calls for increased precaution, instead of justifying supineness on our part. It is fearful to contemplate the confusion, the panic, and the actual national peril which would inevitably attend any sudden alarm or apprehension of war at this moment. While France has been maturing her maritime conscription, and preparing a very large reserve of seamen capable of being called out at a moment's warning, no similar or analogous measures have been adopted here, and the certain consequences must be that her fleet being ready

much sooner than ours, some grievous injury might be inflicted on us before we were prepared for resistance.

We rejoice, therefore, to see that Her Majesty's Government have determined to take this subject into their early consideration, and it appears to us that the principles which have so recently guided their decision with respect to the Militia, may be applied with equal advantage on the present occasion.

It is obvious that in both cases *voluntary* service is equally preferable to *compulsory*, and that at all events, the former alternative should be first offered to those from whom the contingent (or *quota*) is required, accompanied by a reasonable encouragement in the shape of a bounty.

It will be seen by the draft of the Bill which accompanies these suggestions, and which was drawn up by Sir Thos. Hastings (assisted by the Solicitor of the Admiralty, under Lord Haddington's directions) in 1846, that this subject was under the consideration of Sir R. Peel's government at that period, together with all the other questions connected with our National defences.

The totally unguarded state of the country in 1844, when a sudden rupture with France appeared for a short time impending, and the insults and calamities which might in consequence have been inflicted on us, had produced a deep feeling of alarm and anxiety amongst all those who were fully aware of the extent of our danger ; and there is no doubt that if the change of Administration which so soon occurred, had not taken place, all the great measures indispensable for the National security (and of which many were actually in progress*) would have been speedily carried into effect.

* The strengthening the fortifications of all our great Naval arsenals, the enlargement of our Dock-yards, their adaptation to Steam purposes, the fitting Steam Guard-ships, organization of the militia, &c.

Amongst those which have been since altogether neglected, or postponed, that to which we are now addressing ourselves stands foremost, and we hope that a perusal of the scheme at that time prepared, under the direction of the First Lord of the Admiralty, and which includes in its provisions so large a proportion of the sea-faring population of the United Kingdom, may materially facilitate the labours of the Committee. We advisedly abstain from entering into its details on this occasion, because, if the principle should be adopted, the machinery by which it is to be carried into operation, and the conditions with respect to enrolment, will, we presume, be assimilated to those already determined on for the Regular Militia, as nearly as circumstances may permit.

It is however important to remark, that the proposed measure does not extend beyond what may be termed the *sedentary* part of our Maritime population, who are exempted by law, from service in the Militia, as being liable to impressment; and that a more comprehensive arrangement becomes necessary to include Seamen employed in our Foreign and Coasting trade, of which, according to the latest Parliamentary Returns, the number amounts to about 240,000. We would therefore further suggest that all the Seaport towns be assessed according to the relative magnitude of their Trade and Shipping, to furnish certain *quotas* of Seamen for the Royal Navy: volunteers, if possible, but if they are not to be procured within a short fixed period, then by Ballot, or such other compulsory process as may be enacted by law. We again abstain from going into details for the reasons already stated, but we shall be ready to offer any further explanation of our views which their Lordships or the Committee may think necessary.

We would only further observe that in laying these

remarks before their Lordships we in no degree intend to call in question, the undoubted prerogative of the Crown to demand the services of all its subjects whenever the safety of the realm, or the emergency of the occasion, may require them ; but we have endeavoured to suggest means by which they may be obtained with more mildness and consideration under ordinary circumstances, without danger to the great and paramount object which we trust will never be lost sight of—Our Naval Superiority.

W. B.

T. H.



R E M A R K S
ON
THE CONDUCT
OF THE
NAVAL ADMINISTRATION
OF
G R E A T B R I T A I N
SINCE 1815.

BY
REAR-ADMIRAL BOWLES.

FAS EST ET AB HOSTE DOCERI.

FOURTH EDITION.

B



PREFACE TO THE THIRD EDITION.

London, 1847.

SINCE the publication of a small pamphlet last year, the chief object of which was to vindicate Sir R. Peel's Naval Administration, and to prove that the exertions made during that period, both for the improvement of our great maritime arsenals, and the increase of our Navy, deserved the gratitude of the country, many of my friends have pressed me to undertake some more extended and popular observations on this subject, in the hope of dispelling the erroneous impressions which prevail on many important points, and directing public attention to those great questions which are at present almost entirely lost sight of, amidst the petty political and personal attacks with which our newspapers daily teem. I at first declined a task which I foresaw might, if fully and conscientiously executed, involve me in disputes and controversy ; but on further consideration, I could scarcely feel justified in refusing to lend my assistance (such as it may be), where the object to be attained is so vitally important, and I was encouraged by the recollection of the success which attended a similar effort made by me on a former occasion, when having, in a pamphlet (to which I did not then affix my name), endeavoured to draw the attention of the public

towards many points in the conduct of our Naval Administration, which at that time (1830) appeared to me dangerous and objectionable, I had afterwards the secret satisfaction of observing that almost all my suggestions were gradually adopted; and I have thought that I should be enabled to place my subsequent observations in a clearer point of view, if I republish, on the present occasion, the Remarks to which I have alluded, and thus enable my readers to divide into two distinct periods, the measures pursued by our Naval Administration from the Peace of 1815 to 1830, and from thence to the present time. They will observe that, during the former period, my suggestions were chiefly directed to the following points.

The inferiority of our Naval Architecture *generally*, and more particularly the disparity of our frigates and smaller vessels, when compared with those of other nations.

Our neglect of artillery practice, and disregard of the recommendations of various officers (but more especially Sir Howard Douglas), on this subject.

The necessity for assembling an annual squadron for exercise and instruction.

Our backwardness with respect to the commencement of a Steam Navy.

The unnecessary haste with which our newly commissioned ships were hurried off to foreign stations, in an imperfect state of discipline and equipment, overloaded with stores and provisions, and too little prepared for any sudden emergency; and I recommended a more careful and detailed inspection imme-

mediately previous to their sailing, which would guard against this evil.

I suggested some improvements in our code of Naval discipline (which were very soon afterwards introduced), and I took a short review of the Naval preparations and improved systems of foreign Powers as contrasted with our own. If those who may honour these pages with a perusal will turn, in the first instance, to those Remarks, they will then be enabled to accompany me more readily in the historical glance which I now propose to take over subsequent events.

A new Administration came into power in 1830. Sir J. Graham was appointed First Lord of the Admiralty, having Sir T. Hardy, as Senior Naval Lord, under him; and a series of measures were soon afterwards undertaken for remedying many of the evils, of which they were fully aware.

The construction of small frigates and ten-gun brigs was entirely stopped. The School for Naval Artillery was established at Portsmouth, on board the *Excellent*, on the exact plan proposed and sketched by Sir Howard Douglas. A squadron of exercise was fitted out, and towards the latter end of 1831 we commenced that progress of improvement in our Naval architecture, which bids fair to place us as far in advance as we formerly were in arrear of our maritime rivals.

I would by no means assert that our new ships are perfect, or that farther modifications of their shape may not correct some defects complained of; yet

when I observe their great superiority in almost every important quality, the ease with which they carry their heavy armament, their stability, fast sailing, roominess, and stowage, I am much inclined to suspect that the future alterations will be few and trifling; and I am more strongly led to this opinion by observing how closely they are copied by all later competitors, and that no one ventures to reject the great advantage of their bold increase of breadth.

The result of the change of system which has taken place since 1830, may be thus recapitulated. We have entirely abandoned the construction (and I hope the repair) of all those classes of ships which, from their great inferiority in size and force to those of other maritime nations, were no longer calculated to maintain our Naval superiority. Our new ships of the line, of all classes, are such fast sailers, that decisive actions will be brought on with much more facility than formerly, when the slowness of a great proportion of our fleet (and of the three-deckers more especially), so frequently perplexed and retarded our manœuvres; our large frigates are most powerful and effective ships, and only require to be increased in number without delay, while our corvettes of twenty-eight guns (carrying, as all the new ones will do, two long guns on the upper deck, to enable them to reach steamers) will be equal to anything of their class belonging to other nations, and will, I hope, supersede those infinite varieties with which our Navy has hitherto abounded, and which have from their diversity of equipment, formed a source of perpetual expense and perplexity in our dockyards,

as well as a constant obstacle to that uniform system which we have been endeavouring to establish since 1832, with respect to the masts, yards, &c. throughout the service.

With respect to our smaller vessels, it has now become so obvious that almost all the duties required from them during former wars must in future devolve on steamers, that it would, in my opinion, be an unjustifiable expense to keep up so large an establishment as heretofore. The protection of our coasts and coasting trade will be confided entirely to steamers, and on all foreign stations they will also, in all probability, gradually supersede small sailing vessels. Our best policy will, therefore, be to avoid increasing the number of sloops and small brigs beyond the actual wants of the service during peace, and to confine our new constructions to brigs of the largest class, the only ones now equal to those of other nations. Our future Navy would then consist of one class of three-deckers, one (or at most two classes) of two-deckers; one of large frigates; one of twenty-eight gun corvettes; and one of eighteen gun brigs.

We have still so much to learn with respect to steam vessels, that I will not venture to offer any decided opinion upon the classes and dimensions to which it may be advisable to restrict ourselves in future, but the enormous cost of the *Terrible*, and others of that description, leads me to think that equal advantages may be obtained at a much smaller expense; because it is obvious, that in the present state of maritime warfare, steam vessels will be auxiliaries rather

than principals in Naval engagements, and that arming them with any large number of broadside guns, will only tempt them to expose their most vulnerable points to the enemy's fire. I am therefore inclined to think that the largest class should not exceed 1600 tons; while our great endeavour should be, to obtain the most buoyant form with the lightest draught of water, and that the bows and sterns are so shaped as to ensure the greatest amount of head and stern fire.* And as soon as experience has determined the simplest, lightest, and most enduring engine, producing in vessels of the same form and construction the greatest velocity, it should be very generally introduced, taking all possible care that each part is identical, and applicable to every vessel of the class to which it belongs.

I doubt the advantage of continuing the construction of ninety-gun ships on two decks. They are in all respects nearly as expensive as three-deckers, and their superiority in sailing is not (as was expected) so great as to counterbalance the loss of a whole battery. The Rodney (the first of this class built by Sir R. Seppings) sails indifferently; the Queen has, during the trials of the last two years, been generally equal, if not superior, to the Albion; and if the sailing of our first-rates can (as I see no reason to doubt), be relied on to this extent, their superiority in action is very decisive.

Our frigates of thirty-six guns, built at a period when we could not screw up our courage to construct larger

* It will be easily seen that these observations were written before the application of the screw to ships of war on a large scale.

ones, are so inferior to those of all other nations, that I recommend their entire discontinuance. We cannot reasonably suppose they will beat French or Americans of nearly double their force, and yet they will be expected to try. Fortunately we have very few of them, and I hope we shall build no more; but a very considerable increase in the number of our large frigates is so indispensable, that I trust no time will be lost in supplying our deficiency in this respect. It appears scarcely credible that between 1830 and 1841 only one ship of this class (the Vernon) was built; and although two have since been launched, and several others are in progress, it should be remembered that the French Navy is still very superior to our own in this description of vessel, so important at the commencement of hostilities. In determining on the model to be preferred in our future constructions, I trust we shall proceed with more caution, patience, and seamanlike discretion than has hitherto characterized our proceedings on similar occasions. A new experimental ship should never be sent to a foreign station until she has been subjected to a careful and prolonged trial at home. Some alterations of stowage, the position of the masts, and various other points which I need not enumerate, will always be found necessary before the ship is brought to her best sailing and working trim; and it is one of the great advantages of our present system, that our new ships can be carefully tried in the squadron of exercise, sent into port for any alterations which may be considered advisable, and no longer hurried off to distant stations in almost total ignorance of their good

qualities or defects. We are now endeavouring to place our Navy on the highest possible footing, both in point of force and efficiency; but immense sums of money will be wasted, and our object, after all, only imperfectly attained, if we neglect those precautions which common sense and prudence so obviously dictate.

In my opinion, our new ships, after being fully tried and reported on, should be carefully laid up, and our half-worn ones (of which we have but too many) brought forward for service during peace. Our whole Navy will soon be *half worn* if we continue our present system, under which a very large additional expense is incurred by perpetually repairing our decaying ships at home, while we are wearing out our new ones abroad.

It is not sufficiently considered how rapidly old ships deteriorate by remaining in ordinary under these circumstances; whereas, if they were kept on service as long as they will last without a repair beyond their value, and on their return from abroad immediately taken into dock and refitted, a very great saving would be effected, not only by checking incipient defects and decay, but by preserving great quantities of stores and fittings of all descriptions, which, when the ship is laid up, become lost to the service. I doubt extremely whether we do not lose much more than we gain by our excessive haste to pay off ships which have been perhaps three or four years abroad, but are still in good condition, and only require a slight repair; and whether, under improved management, they might not

be refitted and sent to sea again in less time, and in a state of order and efficiency far exceeding that of our newly-commissioned ships, many of which are two and three months fitting out, and are consequently more expensive. If this plan were adopted, we should no longer see fine and well-disciplined ships' companies disbanded and dispersed, after a period of service barely sufficient to complete their training and organization; and although many changes of officers and men would necessarily take place, the discipline and arrangements of the ship would never be entirely broken up—a large proportion of the crews would either remain or return—the total destruction of everything which cost so much time, labour, and money, to establish and perfect, would be almost entirely avoided—the trim and proper stowage of the ship would be known and preserved, and the principal defects of the hull being pointed out to the officers of the yard, much unnecessary expense in examination would be saved.

It should be an invariable rule to order ships returning from foreign stations to the ports where they were last repaired, and where alone their weak points can be accurately known. A very heavy outlay is often incurred in the repair of ships, by an unnecessarily minute and rigid examination, which would have been prevented by a previous knowledge of the nature and extent of the last repair, the quality of the timber used, &c. ; and I will here remark, that considering the very large expenses annually incurred in building, repairing, and altering ships, a most careful revision of the practice now pursued in our dockyards is urgently required,

not only for the purpose of introducing a system of better-considered economy, but also greater regularity and uniformity throughout those establishments, and preventing, as far as may be possible, the many conflicting and contradictory orders by which so much confusion is created, time lost, and expense incurred.

The revision I recommend ought not to be delayed, but I do not hesitate to assert that efficiency and subordination will never be thoroughly established in our Naval arsenals until all politics and electioneering are completely banished from them, by placing all those employed within their walls under the same incapacities as the Revenue departments, and thus breaking up the partiality, favour, and jobbing, which now so notoriously prevail.

The success of our School for Naval Artillery has been in the highest degree satisfactory, and has led to the instruction of the whole corps of Royal Marines in artillery practice, on similar principles. If this system is fully carried out, and improved to the extent of which it is capable, by providing practising ground for all the divisions, our Marines, when embarked, will be found thoroughly acquainted with the use of the great guns, and most useful auxiliaries to the officers and men sent from the Excellent to our newly commissioned ships.

Political events, and the necessity, real or imaginary, for keeping a large force in the Mediterranean (the "Capua" of the British Navy during peace,) have, during this second period,* too often prevented the

* Between 1832 and 1844.

assembling for exercise a sufficient number of ships to instruct our younger officers in the evolutions and manœuvres of a fleet.

We appear to have been equally unaware of the vital importance of this latter object, and of the extreme danger to which we exposed ourselves, by leaving our coast and arsenals wholly unprotected, while every disposable ship was beyond the Straits of Gibraltar ; and it is impossible to insist too strongly, or too earnestly, on the deep responsibility which any Government will incur, if the system lately established is departed from, and our Home Squadron—our only reserve force—broken up, and dispersed on foreign service.

It was to our state of perfect preparation last year, that we owe the peaceful termination of our differences with the United States ; and although I am no alarmist, and very sincerely deprecate any hostile feeling towards France, I ought not to conceal the important fact, that the Government of that country is preparing with all possible rapidity, and regardless of expense, for great Naval operations ; that all their establishments and arrangements (more especially those which relate to steam vessels) are on the largest and most formidable scale ; and no reasonable doubt can be entertained that all these preparations are well calculated to realize the aspirations and hopes of a strong party, who look eagerly forward to a favourable opportunity for avenging past defeats by some sudden and disgraceful blow, while this country, weakened by domestic discord, and perplexed by political feuds, appears

too much inclined to postpone or neglect all those measures of precaution which the change of circumstances so imperiously demands. It seems but too probable that this session of Parliament, like the last, will be suffered to pass over without maturing even those preliminary arrangements, which are indispensable for enabling the Government to call out the Militia on any sudden emergency, while that more perfect and general organization of our maritime population, by which alone an enterprising enemy can be deterred from insulting our coasts, appears to be altogether lost sight of. It is in the earnest hope of awakening my countrymen to the consideration of these important facts, while we have still time to adopt the necessary measures for guarding against national danger and disgrace, that I reluctantly obtrude myself on their attention. It is our duty to our allies, to Europe, and, indeed, to the whole civilized world, that our defensive precautions should be at least as complete as those of the Continental Powers, and that the general peace should not be endangered by any supineness or want of foresight on our part, which may invite or encourage attack.

It will be, perhaps, convenient to recapitulate in conclusion, the points to which I am most anxious to draw the attention of my readers and the Executive Government.

The first is the necessity of having always at home, or within reach, in a state of perfect preparation, a squadron of reserve and exercise of at least its present strength.

That our arrangements for raising men rapidly on any emergency should be matured and complete: at present they are sadly primitive and imperfect. Whenever seamen are wanted in larger numbers than usual we merely open some public-houses as rendezvous, and send a few officers of inferior rank to the out-ports on this temporary service. In 1845 six months had elapsed before six ships of the line were (some of them but indifferently) manned.

It is, nevertheless, obvious that on any sudden alarm, or probability of war, our first preparations, and the equipment of our first squadrons must depend entirely on the rapidity with which volunteers are collected by officers accustomed to this peculiar service, and who may be depended on, not only for energy and exertion, but also for such a careful selection of healthy and able-bodied men as would prevent the delay and disappointment so often experienced on similar occasions, but which might be attended with such serious consequences on an emergency of this nature. It is equally certain that officers hastily selected, and hurried off to parts of the country of which they have no knowledge, and where they are themselves unknown, must inevitably act under very great disadvantages; and my recommendation, therefore, is that a permanent Recruiting Staff should be formed, which, dividing the United Kingdom into districts, and having head-quarters at all the great mercantile ports, may be constantly entering and forwarding seamen of the best classes in such numbers as the service may require during peace, but whose still more important duty would be to ascer-

tain and report the probable number of men they could raise whenever circumstances occurred demanding extraordinary exertions.

I imagine that the whole kingdom might very conveniently be divided into eight or ten districts, having their respective head-quarters in London, Liverpool, Bristol, Newcastle, Yarmouth, Leith, Glasgow, Cork, and Belfast; and I should propose placing them in communication with the Inspecting Commanders of the Coast Guard, from whom they ought to receive much important assistance and information, and whose more exact and minute local knowledge would be found extremely valuable in perfecting an arrangement of this description, as well as a great saving of expense; for this is a service they can very easily perform without any risk of their attention being withdrawn from their own more special duties. I should recommend that the officers employed on this service be most carefully selected. They should be either Captains or Commanders, and as far as can be ascertained of kind and conciliatory tempers and manners; because I feel confident that if they conduct themselves with propriety and discretion in the execution of this duty, and shew themselves on all occasions the friends and advisers of the seamen in their districts, they will soon acquire much influence and popularity amongst them, and be thus enabled to perform the duty entrusted to them with more usefulness and effect.

Nothing formerly checked and discouraged the entry of seamen so much as the manner of their conveyance from place to place in small miserable vessels without

decent accommodation, or even shelter from weather. This has been since in a great degree remedied, but it still requires the careful attention of the Admiralty.

Having thus stated the principal features of the plan I am desirous of seeing carried into execution, as well as my arguments in favour of it, I will only add that I contemplate no expense whatever beyond such a remuneration to the officers employed as might be considered advisable, and which at most could not amount to more than the difference between their half and full pay.

It has been suggested that the establishment of Sailors' Homes on the model of that now existing in London might be useful at the ports where ships are usually paid off; but although I believe no advantage would be derived from such a measure, as regards the mere boarding or lodging of seamen, who in general on being discharged very soon proceed to London,* yet there is one part of Captain Elliot's system, which might be very usefully put into operation at Portsmouth, Devonport, Chatham, &c., namely, affording all possible assistance to seamen in the care and remittance of their money,† and by this means protecting them from plunder and loss, and I would therefore propose that an officer be stationed at each of those

* Further experience has shewn that I was mistaken on this point.

† I am perfectly aware that men are asked at the pay-table, whether they wish to remit any part of their money to their friends, but this is done at a moment of hurry and excitement, and does not fully meet my views.

ports for this purpose, who might be considered by seamen as their friend and adviser on these occasions, as well as when they were in want of employment, and who would thus be able to impress on their minds a confidence in that Government by whom he was employed for their advantage and protection, and also be enabled by his constant communications with them to retain in the service large numbers of those men, whose training and discipline render them doubly valuable, but who, under our present system are too often entirely lost to the Navy.

I further recommend that all trials of experimental ships should be more carefully and patiently conducted, and full opportunity given for every alteration necessary to ascertain their qualities, before they are finally reported upon by the officer commanding the squadron of exercise, under whose eye all these trials should be carried on.

To these suggestions I will only again add my recommendation for the adoption of an improved system of inspection of all ships ordered on foreign service immediately previous to their sailing, and that the inspecting officer be specially directed to report whether the decks are clear and unincumbered, the ship in all respects prepared for action or bad weather, and the officers and men in possession of their proper accommodation ; and I insist strongly on these points, because I know that none of them are sufficiently attended to, and that many of our ships (especially the smaller ones) often sail so overcrowded and encumbered with supernumeraries, stores, and provisions, that they are not only dan-

gerously deep, but also very soon become sickly, while a great loss is frequently incurred by damage to those perishable articles, unavoidably placed in situations exposed to wet and other injury.

I had at first contemplated the omission of the introductory prefaces to the first and second editions, and which were merely intended to favour the assumed character under which I then wrote, but having been strongly advised by a friend, in whose judgment I place great confidence, to republish my Pamphlet exactly as it originally stood, I have made no alteration whatever. I will conclude by repeating, in the words which I then used, (and which are so much more applicable now) my earnest hope that by exciting the public attention to the errors and omissions which I have endeavoured to point out, I may in some small degree contribute towards averting the dangers to which I confess I cannot look forward without apprehension, and that now, as well as at that time, the warning voice of an officer devotedly attached to his country's service, may not be raised in vain.

INTRODUCTION

TO THE FIRST EDITION.

THE following pages constituted the principal employment of the Author during the last year of a long life passed in the almost constant service of his country, down to the period from which he commences his remarks; and they are submitted to the public as nearly as possible in the shape in which they were found at his decease, except that he had arranged, in the form of notes, such copious extracts from the letters of his correspondents, both abroad and in England, for the purpose of corroborating his own statements, that it was found impossible to insert them without incurring a greater expense in the publication than had been originally contemplated. Many extracts from modern French works on naval subjects* have been omitted for the same reason.

The Editor is not aware that any reason exists for suppressing the name of the Author; but as a draught of the title-page as it now stands was found with the manuscript, his family thought that they should best conform to what appeared to have been his intention, by making no alteration.

* Dupin, Tupinier, *Annales Maritimes*, &c. &c.

P R E F A C E

TO THE SECOND EDITION.

A Second Edition of these remarks having been already called for, the Editor embraces this opportunity of expressing his gratification at this proof of the favourable reception they have experienced, as well as at the numerous testimonies of approbation which have come to his knowledge. He has been most happy to find, that the deference and partiality with which he has always been accustomed to receive the opinions of their lamented Author, have not misled him on the present occasion, and that the unanimous voice of his profession has been in accordance with those feelings which induced him to lay this work before the public.

The tone and temper in which some inquiries after the name of the Author have been made, tend more fully to convince the Editor of the propriety of his original determination to suppress it. The question at issue is a public, and most important one, and it shall not be lost sight of in a personal controversy, which, however skilfully it might be conducted, cannot affect the accuracy of the facts stated in the "Remarks."

To these no answer has as yet been attempted, and the Editor has therefore only thought it necessary, in reply to a letter which appeared in the Times, and some

subsequent remarks in the Portsmouth Telegraph, to insert, at page 47, a short paragraph explanatory of the Author's views on the subject of inspections of newly commissioned ships, previous to their leaving England for foreign service, and to which the present practice of merely mustering the crews bears no sort of analogy.

Of those who are for keeping everything as it is, and who, from indolence or prejudice, oppose all changes, the Editor begs leave to ask how they will be able to justify their conduct, when a few such paragraphs as the following shall have appeared in the newspapers?

“New York, 183—.

“We are happy to announce to our readers the gratifying intelligence of another naval triumph. The United States frigate, St. Lawrence, of forty-four guns, Captain ——, has arrived this morning with her prize the British Frigate, Mercury, of forty-six guns, Captain ——, which she captured off Cape Finisterre, on the ——, after a severe engagement, in which the Mercury lost about one hundred and fifty men killed and wounded, and was completely dismasted, but the St. Lawrence has only eight men killed and twenty wounded, and has not suffered very materially in her masts or rigging.

“The British officers complain heavily of their Admiralty, by whom they were refused a few days time to exercise and discipline a raw ship's company, composed of newly impressed men. They were told they might do this at sea, and the captain was threatened

to be superseded if he made any further difficulty. They sailed in bad weather, and met the St. Lawrence the second day afterwards."

" *Portsmouth, June, 183—*

" We regret to state that accounts have been received of the capture of His Majesty's ship, Tyne, of twenty-eight guns, by the United States corvette Concord, of twenty-two. The official letters have not yet arrived; but it appears that the Tyne was to leeward, and at first chased the Concord, which ship, on making out the Tyne's force, allowed her to approach within reach of her long twenty-four pounders, and then keeping, by superiority of sailing, a sufficient distance on her weather beam, completely dismantled her, taking care not to close until the Tyne became entirely unmanageable. We hear the Tyne's loss is dreadful: almost all the officers, and above half the ship's company, being killed or wounded before the colours were struck.

" We deeply regret to inform our readers, that accounts have also been received of the capture of His Majesty's brig Curlew, of ten guns. She was taken after a severe action by a schooner privateer carrying six carronades, and one long eighteen-pounder, and one hundred and twenty men."

THE EDITOR.

August 2d, 1830.

The foregoing pages were on the point of being forwarded to the printer, when I received this morning the last U. S. Journal, containing the reply of Sir

R. Seppings, to that part of the "Remarks" which comments on the construction of His Majesty's ships of war; and, pressed as I am for time, I cannot but offer a few observations in answer to his letter.

In the preceding part of this preface I have already said every thing which appears to be necessary on the personal part of the question. Sir R. Seppings must be fully aware, that in this free country, the public measures of public men form a legitimate subject of public discussion; and while that discussion is conducted with temper and courtesy, it is not usual to manifest any feelings of personal umbrage or hostility.

My knowledge of the Author of the "Remarks" enables me to inform Sir R. Seppings, with equal truth and sincerity, that he was one of those most especially intended to be assured, both in page 28, and several subsequent passages, that full justice was rendered to his ability, zeal, and exertions; and as his name only occurs once in the whole pamphlet incidentally, as the constructor of the Pylades, I hardly see why he attributes so exclusively to himself the responsibility which it may be supposed attaches equally to his colleagues in office.

With respect to his observations, which I will take in the order they occur, I remark, first, that a reference to the pamphlet will shew that the author did not profess to have any accurate knowledge of the particulars of the first experiment, and consequently passes over the subject in a very few words; but as Sir R. Seppings alludes only to the *final* cruize, I may perhaps venture to ask, if he will tell us the result of the *preceding* ones,

and whether the Pylades was not at first "deficient in many important points, and requiring great alterations before she could be brought to an equality with others of a similar class:" and I may also inquire what character the Pylades has maintained on the Cork station, where she has been frequently tried by Sir C. Paget against the same Orestes, as well as several other corvettes?

Sir R. Seppings so completely confirms the statement in the "Remarks," with respect to the limitations prescribed to the constructors, (Captains Hayes, Symonds, &c.) that the only point in dispute appears to be, whether these limitations were those which ought to have been imposed. Sir R. Seppings must be fully aware that many able naval architects consider the present system of tonnage measurement totally false and erroneous; and he also probably knows that in the case in question, while by this rule the Columbine was called a sloop of four hundred and ninety-two tons, the Satellite appeared to be four hundred and fifty-five only; yet the Columbine's light displacement (or weight of the shell when launched) was only two hundred and fifty-seven tons, while that of the Satellite was two hundred and ninety-two.

	Feet.	Inches.	
The Satellite was	112	3	long
and	30	6	broad.
The Columbine only	105	6	long
but	32	2	broad.

And it was the difference of breadth which gave the fallacious result as to tonnage. Why should not

Captain Symonds have been allowed to build his ship as long as the Satellite, and as broad as he thought necessary? But this he could not do under the prescribed limitations.

I perfectly agree with Sir R. Seppings in thinking that the advantage of increased breadth may be lost by mal-construction.

In the character given of the Tyne by Sir R. Grant, after an experience of three years, it appears that "she steers easy, wears and stays well, rides well at her anchors, stands very well under her sails, and is an excellent sea-boat;" but the trifling qualities of sailing and stowage appear to be omitted, and were probably considered of little consequence, as she was built for "*general purposes.*"

Will Sir R. Seppings try her against the Nimrod, a ship of precisely the same class, but without her weight aloft?

Sir R. Seppings complains, in conclusion, of a want of fairness and candour on the part of the Author, in not noticing the excellent sailing qualities of the Acorn and Satellite. I have looked through the correspondence on this point; and the result convinces me that the Acorn and Satellite, although subsequently (as stated in page 44) very considerably improved, did not at first shew any superiority, but the contrary.—If this statement is incorrect, it may be easily disproved by the official reports.

REMARKS,

ETC.

DURING the time I have been employed in arranging the following remarks on the conduct of our naval administration since the peace of 1815, it has often occurred to me to consider whether the subject is in itself of sufficient importance, and the errors which I intend to point out of sufficient magnitude, to justify an individual situated as I am, without command or responsibility, in arraigning his superiors at the bar of public opinion, and charging them with serious mistakes in the performance of their official duties.

I have very frequently and seriously asked myself these questions; and the only reply which has suggested itself is, that in the first place, no one will, I think, deny the undoubted importance of the question to be discussed; and secondly, as far as regards myself individually, I can most conscientiously disclaim every motive which in any way partakes of personal or political feeling. My advanced age entirely precludes my looking forward to further service in any capacity. I am not soured by disappointments; for my services, such as they are, have been rewarded to the full extent of my wishes or expectations. I have no resentments to gratify, and I can therefore truly

declare that I am induced to enter on the present discussion solely and entirely from a deep sense of its paramount importance to my country; and that I should infinitely have preferred silent approbation, had it been possible, to the invidious task which I am reluctantly undertaking.

Let me, however, before I commence my observations, assure my readers, and especially those to whom I may appear to impute blame, that I write these pages under a full conviction of the difficulty of directing so great a department as that over which they preside, in such a manner as to secure universal satisfaction; and although I should wish to see some important alterations, yet I am perfectly aware that, at no former period of peace, was the British navy in many points in so satisfactory a state, or in better preparation for any sudden emergency. I render therefore full justice to those by whose zeal and exertions this result has been obtained—and if, in the course of these remarks, I am thought to censure too severely those to whom much national gratitude is due, I trust they will attribute any involuntary warmth of expression to the natural anxiety and earnestness of an old officer, who fears that we are too pertinaciously adhering to antiquated systems, and not sufficiently attentive to the changes which are operating around us.

I write with all the advantages which my having been an eye-witness of former errors and mismanagements can confer. I remember the commencement of the two last wars in 1778 and 1793, and the circumstances which I shall presently state will, I think,

convince my readers that, at both the above-named periods, many opportunities of achieving brilliant successes were lost, and incalculable injury inflicted by our enemies on our commercial marine, in consequence of the vicious system which at that time prevailed to the greatest extent (and is even now far from being totally eradicated), of adhering to old models and old classes in the construction of our ships of war, instead of carefully observing the improvements introducing around us, and more especially amongst our most formidable rivals. A few instances will suffice:— After the peace of 1763, when the combined fleets of France and Spain had been almost totally destroyed by a series of reverses unparalleled in naval history, and terminating with the surrender of an entire fleet at the Havannah,* these two powers were of course obliged, during the fifteen years which ensued, to create an entirely new navy; and within the same period ours was also nearly rebuilt, but on such different principles, that when war again broke out in 1778, we very soon found ourselves completely over-matched, not only in the numbers, but in the description of ships with which they opposed us. We had gone steadily on pursuing our old plans, building and repairing small ships of the line, sixty-fours and fifties, while almost all their new two-deckers were at least seventy-fours, with a very formidable sprinkling of heavy eighty-fours in their line, carrying twenty-four pounders on the main deck, and of course very decidedly

* Taken, nine ships of the line; sunk, three; building, two.

superior to ours. When Count D'Estaing appeared on the coast of America, in 1778, with twelve sail of the line, he had two eighty-four gun ships, six seventy-fours, three sixty-fours, and one fifty-four ; while Lord Howe's fleet of thirteen consisted of one seventy-four, seven sixty-fours, and five fifties ; numerically, indeed, superior, but so much the reverse in point of actual force, that that brave officer did not venture to engage them until he could find an opportunity of bringing his fire-ships in aid of his attack. And a most convincing proof of our inferiority was afforded a few days afterwards, when the fleets having been separated and dispersed by a gale of wind, two of our fifty-gun ships fell in with two of the French eighty-fours, very much disabled ; and although both engagements appear to have lasted several hours, and to have commenced under circumstances the most favourable to the English, they were in each case finally obliged to retreat on the appearance of fresh ships coming to the assistance of their antagonist. A third action, fought at the same time between the Isis of fifty and Le Cesar of seventy-four, was equally indecisive. How different would have been the result if our ships had been seventy-fours or eighty-gun ships ! and what a change in the aspect of the first naval campaign would the capture or destruction of three of D'Estaing's squadron (one of them his own flag-ship) have produced !

The history of that war will furnish abundant instances of similar and most mortifying failures, all, or almost all, attributable to the unwise and impolitic conduct of our naval administration during the preced-

ing peace, and to the inferior description of ships which we had persisted in building. But I will not fatigue my readers by multiplying examples unnecessarily.

I think this dearly-bought experience was not entirely lost upon us, and that after the peace of 1783, we did begin seriously to augment the number of our larger ships, and to a certain degree discontinue building those of inferior classes, (sixty-fours and fifties); but I was very much struck by one remarkable instance of obstinate adherence to our old system on the part of the Navy Board. The Foudroyant, of eighty guns, had been taken from the French in 1758, and was universally considered, during the whole of the American war, the finest two-decker in the British service; but no persuasion could induce the surveyors of the navy to imitate so desirable a ship; and it was not until 1793, *thirty-five years* after she had been in our possession, that the first eighty-gun ship on two decks was launched from a British dock-yard.

It was, however, more especially with respect to our frigates, that the old system still prevailed in its full and fatal force. Notwithstanding the well-known improvement of the French navy in this particular, I do not think that at the commencement of the war in 1793, we had a dozen frigates in our whole navy, carrying eighteen-pounders on the main-deck; and it was not until several very unsatisfactory actions* had been fought by our small thirty-two gun ships, that we began to replace them by others of a superior

* See those of the Thames, Iris, Venus, Boston, &c., in 1793 and 1794.

description. In the meantime, however, and during the first two years of that war, our commerce suffered terribly from the French cruising squadrons of heavy frigates, while we had no ships of equal force to oppose to them; until at an enormous expense, and by employing all our merchant building-yards, and every species of inferior timber (fir particularly) we had created almost a new navy (as far as frigates were concerned) to supply our previous deficiency in this respect.

Trusting, therefore, that these facts, which clearly prove that in the first years of the two last wars we lost, from the want of due previous preparation in this important particular, all those advantages which brilliant successes at the commencement of hostilities inevitably bring with them, would not be quite disregarded by the present generation; it will be readily believed that at the conclusion of the late eventful war, I was an anxious as well as an attentive observer of the measures to which our naval administration would resort for the purpose of effectually meeting the new circumstances which had arisen. The war with the United States had but too clearly developed the system of naval policy, on which our new rival for maritime superiority was successfully acting. Their three principal classes of ships, although nominally of the same force as our own, were really nearly one-third superior in size, calibre of guns, and number of men; and various unsuccessful actions had but too clearly proved that neither professional skill, nor the most brilliant personal courage and exertions could compensate for this great disproportion of force.

I had, therefore, felt perfectly confident, that when we began to turn our thoughts seriously towards rebuilding our navy, a measure which at the termination of the war had become one of inevitable necessity, —the greater part of our ships, and especially the smaller classes, being in a very decaying state,—the considerations to which I have referred would have their due weight; and that in determining the dimensions and force of our new ships, we should, instead of adhering servilely to old models and classes, be very careful to build such only as might be fully capable of opposing at least an equal force to that which we were to encounter: and this was the more necessary, because it very soon became universally known, that the success of the American navy had produced a deep impression throughout Europe, and that France especially, as well as several minor maritime powers, were following the example of that system which had been attended with such beneficial results.

I saw with much pleasure, that with respect to our ships of the line, we were very judiciously abandoning our old-fashioned and heavy-sailing second-rates, and determining to build in future no three-deckers smaller than the Caledonia; and that our new two-deckers were to be powerful eighty-four-gun ships, carrying twenty-four-pounders on the main deck, and therefore, in my opinion, not materially inferior even to the Americans. But here, alas! my satisfaction ended; and what was my disappointment when I saw between forty and fifty new frigates laid down in our different dock-yards, all except eight built on old French

models, carrying eighteen-pounders only on the main deck; all in short of the force of the unfortunate Java and Guerriere, possessing all the defects of these ships, their want of room and stowage,* and that we were consequently replacing our frigates on the same footing of comparative inferiority, which I had hoped it would have been our first study to avoid! I should have thought that instead of incurring such an immense expense† in building frigates of an inferior description, it would have been better economy and wiser policy to have contented ourselves with a smaller number, but of a superior class, following rather the model of the Pomone and the twenty-four pound frigates built after that beautiful ship, one of which, the Endymion,‡ proved in her action with the President, the largest of the American frigates, that those of this class are very little, if at all, inferior to any single-decked ship.

It will hardly, therefore, appear credible, that while we have been building at such an expense so large a number of small frigates, we have not since the peace laid down a single one on the model of the Pomone or Endymion; a class which excel the former as much in

* These frigates can only stow (*under hatches*) three months' provisions, and two and a half months' water.

† Probably nearly two millions, taking the old calculation of £1000 per gun.

‡ The President was captured by a squadron, but engaged by the Endymion only. The loss in killed and wounded stood thus:—

	K.	W.	TOTAL.
President	35	70	105
Endymion	11	14	25

good qualities of sailing and stowage, as in the more important point of superior force.

I regret to say that my animadversions do not end here.

When it was seen, towards the conclusion of the war, that the Americans were constructing a class of corvettes intended (as they unfortunately too soon proved themselves) to be decidedly superior to our eighteen-gun brigs, which until that time were undoubtedly the finest and fastest vessels of their class, it was naturally to be expected that, when we came to rebuilding our smaller descriptions of ships, our attention would have been peculiarly turned towards a larger and more powerful ship-corvette, carrying twenty-two or twenty-four heavy guns, calculated to supersede the old-fashioned ship-sloops of former times, which from their over-weight aloft, and want of stability and stowage, had become totally unfit for modern naval warfare. Here, alas! I was again entirely disappointed. The subject does not appear to have excited any attention until about 1820, when fourteen of the old class of twenty-eight-gun frigates, which had been from their bad qualities totally exploded during the last war, were ordered to be built; and about the same time we commenced a series of expensive (and as it always has appeared to me most unprofitable) experiments on our eighteen-gun brigs, against which we had conceived an unreasonable prejudice, because they could not beat the American corvettes, in every way so much their superiors.

There can be no doubt that vessels of this peculiar

description are less calculated than others for regular engagements; because, having only two masts, if one is disabled, they become comparatively helpless; but this disadvantage is counterbalanced by their remarkable handiness, good sailing, and stability, in which latter qualities they equalled most of our best frigates; and my naval readers will not have forgotten the brilliant actions fought by the Pelican, Sylph, and Kangaroo, (as well as many others which I do not now recollect,) during the late war.

Instead, however, of availing ourselves of the good qualities of these brigs in our draughts for a new and improved class of larger corvettes, the extraordinary idea occurred to us of converting these very identical brigs into ships, and that, by the addition of a mizen-mast, we should at once secure the desired superiority. Surely professional experience can scarcely be necessary to convince my readers of the absurdity of such an expectation. I need only say that vessels of this description are built on the nicest mathematical calculations, and that any alteration by which these are even slightly deranged, must produce an injurious effect. It will therefore not surprise any one to learn that our brigs thus converted into ships lost all their good qualities; and although a heavy expense was incurred in placing, replacing, and again shifting and altering the height and position of their masts, they still continue very inferior to their former selves.

I am aware that some official reports on the good qualities of these *ci-devant* brigs, may be produced against me; but I will only just venture to ask,

whether, as the alteration in question was very generally known to be a favourite hobby at the Admiralty, it is not just possible that a commander looking forward to promotion, might not like to hazard a very decidedly adverse opinion on a supposed improvement of his superiors? Let me also inquire whether the *Trinculo*, the only brig which was allowed to join the experimental squadron under Sir T. Hardy, did not, in spite of defective copper, spars, and rigging, give very satisfactory testimony of what might have been expected from her, if she had been fairly and properly prepared for the trial?—and did not the *Alert*, on the contrary, newly fitted out and coppered, and with every advantage given her, sail worse than any other ship in the squadron? Would it not have been fair in this case, if truth was the object, either to have tried the *Trinculo* against the *Alert*, or having proved that the latter as a ship did not answer, to have restored her original equipment, and then ascertained, with the same squadron, whether the brig or the projector was in fault?

I confess I felt much mortified when I heard these particulars; because it was impossible not to feel that an important experiment had been unfairly conducted, and the most obvious test apparently evaded.

With respect to the ten-gun brigs, of which we appear to be so fond, and on which, during the last ten years, such large sums must have been laid out, I can only say that in my judgment they are entirely unfit for every purpose of war, as they sail indifferently, and are, in point of force, inferior to most pri-

vateers. I would therefore almost pledge my existence, not one of them is seen on the sea in six months after the commencement of hostilities. How those who have lavished the public money on this most useless class of vessel will then be able to justify themselves I do not presume to conjecture.

I see, by referring to the list of the navy, that we have now above forty of these brigs afloat or building, all, except one or two, laid down since the peace, besides twenty-eight more employed as packets; for which service experience has now fully proved them to be less calculated, and from their construction more unsafe, than any other description of vessel which could possibly have been selected.

This subject naturally leads me to mention some partial experiments ordered in the course of the years 1826 and 1827. The first was on a very small scale, and the ships tried were only three eighteen-gun-ship corvettes, built by Captain Hayes, R.N., Professor Inman of the R.N. College, and the Surveyors of the Navy. From all the accounts I could collect, the trials were made at an unfavourable period of the year, and in a hasty and imperfect manner; the officer commanding the squadron was changed once, if not oftener, before any final report was made: and no known good sailing ship was ever in company with them. As far as I could learn, however, the *Champion* and *Orestes* were both superior ships to Sir R. Seppings' *Pylades*, and possessed many good qualities of stability and stowage, which the latter wanted; and I hear that they have since maintained their good character in these respects, especially the *Orestes*.

This experiment led to another on a more extended scale. Captain Hayes was ordered to build a twenty-eight-gun ship, and a corvette of eighteen guns; Captain Symonds (an officer who in the construction of small vessels had shewn a remarkable talent for naval architecture) was to build a corvette of eighteen guns; Professor Inman, a twenty-eight-gun frigate; and the Navy Board were to produce a new twenty-eight-gun frigate, and two eighteen-gun-ship corvettes.

Having taken a very great interest in this second experiment, and being on intimate terms with many officers in the little squadron, I solicited from them all the information on this subject with which they could supply me, and kept up a constant correspondence with them during the course of these experiments. It was, however, impossible not to regret deeply that so large an expense should have been incurred in trying experiments on the qualities of so useless and objectionable a class of frigates as these old-fashioned twenty-eight-gun ships, which have been long since abandoned in all other navies, from a perfect conviction that it is impossible to give stability and swiftness to a vessel which is expected to carry the upper works of a frigate on the fine and delicate bottom of a corvette. The French have, for this reason, entirely given up what they call "*corvette aux gaillards*," finding that their "*accastillage*" (high bulwarks) made them always sail and carry sail badly; and as it was very generally known at the time these trial-ships were first ordered to be built, that both the French and Americans were constructing a large and powerful

class of corvettes, carrying heavy long guns, twenty-four and eighteen pounders, as well as thirty-two pound carronades, I was in great hopes that we should have followed their example without loss of time, instead of wasting our money in experiments on ships, which modern improvements have now rendered antiquated and obsolete.

The first great mistake committed, appeared to me to be in limiting the constructors unnecessarily as to the dimensions, and more especially as to the breadth of their ships, by insisting that they were not to exceed a certain prescribed tonnage. Now it should have been well known at the Admiralty that tonnage, as taken by the old rule of admeasurement, neither expresses accurately either the displacement or capacity of a ship; and although I perfectly agree with them in thinking that the constructors should have been obliged to build their ships nearly of the same size, yet my opinion was, that the great object being to obtain as perfect a specimen of each class as possible, the restriction should have been on the length only, and that they should on this occasion have had a *carte blanche* as to their model in all other respects; and this was the more necessary in the present case, because the besetting sin of our naval constructors having been hitherto an invincible unwillingness to give sufficient breadth, and the consequence a failure in point of stability in most of our ships, it became of more importance to prevent the Surveyors of the Navy, by insisting on a restriction of this nature, from bringing down all the other ships to the level of their own.

What was the result? Captain Hayes, contrary to his own judgment, but not choosing to sacrifice length, built both his ships considerably narrower than he otherwise would have done: and the consequence was, they failed in stability.

Professor Inman, fully aware of the advantage of breadth, gave up a part of the usual length of ships of that class to obtain it. Captain Symonds followed his example, and, as might and ought to have been foreseen, both the *Sapphire* and *Columbine*, although possessing many excellent qualities, and very superior to most ships of their respective classes, were still much inferior to what might have been expected, if their ingenious constructors had been left to the uncontrolled exercise of their own judgment.

It was also much to be regretted that advantage was not taken of this opportunity to ascertain more satisfactorily than we had hitherto done, the comparative qualities of some new classes of ships lately introduced into our navy, and with which our officers in general were but little acquainted. After the unfortunate issue of the first actions with the large American frigates, the *Leander* and *Newcastle* were hastily built on a draught supposed to be similar to that of the *United States*, *Constitution*, and *President*; but as they were at sea only during the last half-year of the war, and chiefly together, there were not, I believe, many opportunities of determining whether they fully realized the expectations of their constructors.

In the only actual trial they had, off *Porto Praya*, the *Constitution* out-sailed them and escaped; so that

it was evident we had still something to learn with respect to these ships ; and at the conclusion of the war such experiments should have been tried as to place this question on some certain footing.

With our usual heedlessness, however, this whole subject was dismissed from our minds the moment peace was concluded. The *Leander* and *Newcastle* were forthwith fitted out as flag-ships for foreign stations, with the usual incumbrances of poops, &c. ; so that any further experiments on their sailing became out of the question, and they were in this way entirely worn out and taken to pieces, after only six months trial in actual service.

The same extraordinary system has been continued with respect to eight new ships of the same class, built since 1816. Three of these have been employed on foreign stations in the same way ; but no attempt has yet been made to satisfy ourselves by actual and careful experiment (conducted under the eye of the Admiralty or Navy Boards) whether these ships are or are not to be depended upon for the same good qualities which were so remarkable in those of which they are intended to be exact imitations.*

Now this important question might and ought to have been thoroughly investigated in 1827. Nothing would have been more easy than to have fitted out one of these first-class frigates, another of the second, (the *Endymion* for instance,) and one of our new eighteen-pounder ships ; and while the other experiments were

* The *Java* has returned from India with a very indifferent character.

going forward with respect to the twenty-eights and corvettes, we might have ascertained, beyond the possibility of doubt, the comparative sailing, stability, and capacity of these important classes of ships. I had almost omitted to mention another point to which our attention should also have been directed at that time :— the Barham (the first of a large number of seventy-four-gun ships which have been since cut down and converted into frigates) was nearly ready for sea, when Sir T. Hardy hoisted his flag and took the command of the experimental squadron. It was surely of very great consequence that the qualities of this new class of ship should be carefully ascertained before we proceeded further on a very expensive and serious operation; and a most excellent opportunity of doing so at that time presented itself. But no, the Barham too was to be fitted for a flag-ship, and sent off immediately to the West Indies, where I cannot believe many satisfactory opportunities will occur of fully ascertaining her good or bad qualities, as the weather is generally fine and settled in that country, and the squadron chiefly composed of small and inferior vessels, whose bad sailing, when tried with the Barham, will rather tend to mislead the commander-in-chief, than enable him to form a correct judgment of her real qualities.

Every body who reads these pages will, I am sure, agree with me, that such an experimental squadron as the one I have suggested must have been attended with the best consequences, and that it would have had a strong tendency to check a practice, which has always too much prevailed in all our naval adminis-

trations, of building or altering large numbers of ships on some particular plan, without sufficient previous trial and consideration. What, however, was the result of that which actually took place? In the first trials, the ships built by Professor Inman, Captains Hayes and Symonds, although, for the reasons I have already stated, far inferior to what they might have been, were superior to those built by the Surveyors of the Navy; one of the latter, the Tyne, of twenty-eight guns, was actually sent back to Portsmouth as totally unfit to compete with the remainder; and although, after various expensive alterations, they were all considerably improved, especially the two corvettes, (which I understand were pretty close imitations of the Champion and Orestes, and very unlike the Pylades), yet it was quite clear that our official naval architecture ought no longer to be implicitly relied on, and that a system must be radically wrong under which the best ships which could be built were found on trial deficient in many important points, and requiring great alterations before they could be brought at all to an equality with others of a similar class; and I am sure the whole profession concurred heartily with the gallant and experienced officer who was entrusted with the command of the experimental squadron (and than whom a better choice could not have been made), in recommending that a further trial should be made on a larger and more extended scale; and that Captains Hayes and Symonds and Professor Inman, should be each employed to build a frigate of the largest dimensions, to be finished with as little delay as possible, and fairly tried against

the most approved ships of the same class. I understand His Royal Highness the Lord High Admiral fully approved of this suggestion, and gave immediate orders accordingly; but as I have not since been able to discover that any such ships are in progress, I fear that official influence or jealousy has been sufficiently powerful to extinguish all hope of further improvement at present.

From this important subject I pass to the measures which have been adopted to preserve the discipline, efficiency, and activity of our ships in commission, and to counteract the inevitable effects of a long and profound peace on all warlike establishments. Between 1784 and 1793, we had three considerable naval armaments, and there was consequently but little time for either officers or men to forget what they had previously learned; but I remember that it was during this period the constant practice to assemble our guardships at Spithead as early in the spring as possible, and to exercise them during the summer months in those various evolutions which would naturally suggest themselves to the mind of an experienced officer. Has this good old system been followed up? I fear the reply will be, that during the last fourteen years (with one solitary exception in 1818) no squadron has ever assembled for exercise; that Spithead and Plymouth Sound are generally to be seen without even senior officers' ships to enforce regularity, as well as to stimulate by good example to activity and emulation: and that our ships of war, when fitted out for foreign service, proceed to their respective stations without

any previous inspection or review, and almost always singly, encumbered with passengers,* and overloaded with provisions and stores, resembling too often a merchant ship with a full cargo making all haste to its port of discharge, rather than a British man of war in perfect trim and equipment, and carefully preserving during peace, that complete state of order and preparation which can alone secure superiority in war. It is quite unnecessary for me to enlarge on the ill effects which this deviation from our former system must necessarily produce. An entire new set of officers are gradually replacing those whose long experience in war might perhaps have rendered further instruction less necessary; and if the rising generation are educated in a system of negligence and inactivity, what will be the result at the commencement of a new war, when our utmost exertions will be required to secure our superiority over rivals who have certainly lost no opportunity of improving and perfecting their naval establishments, and whose minds are fully alive to the errors to which they attribute their former reverses?

A regiment, when ordered on foreign service is always reviewed previous to embarkation, and its state of discipline and appearance confidentially reported on. Such a practice introduced into the navy would have the best effects, both by encouraging emulation and exertion, and preventing that fatal system of hur-

* The Champion of eighteen guns, sailed not long since for the coast of Africa with fifty supernumeraries, for whom there was no room below, stowed on the main deck, *under canvass*.

tying ships to sea in an imperfect state of equipment; and nothing could be more easy and simple than the detail of such an arrangement. A newly commissioned ship, after being reported ready for sea, might be allowed any reasonable time to prepare for being reviewed, and the captain should have full liberty during this interval to get under weigh, and exercise in any manner he thought proper. The commander-in-chief should then, after mustering the crew, and fully inspecting all the interior arrangements, see the men exercised at their guns; and the ship being got under sail, should be put through all the various evolutions which it is of most consequence to perform steadily and correctly in the presence of an enemy. If this regulation were rigidly adhered to at Portsmouth and Plymouth, no ship could in future proceed on foreign service, materially deficient in discipline or preparation, and the thoughtless and injurious system of encumbering and overloading them in the manner I have described must be at least considerably checked, if not altogether put a stop to.

Another most important point to which too little attention has been paid since the peace of 1815, is our artillery practice. There can be no doubt that our reverses during the American war are to be attributed, not only to the great superiority of the ships we engaged, but to the imperfect manner in which our officers and men had been trained to the use of their guns. It will, perhaps, hardly be credited hereafter, that there was at that time no regular system of exercise established by authority in the British Navy,

but that each ship had its own particular plan and method, varying of course according to the experience and degree of information possessed by the captain, as well as to the degree of importance which he attached to the subject. I need not detail the fatal negligence which too often prevailed, and which became only known in its full extent by its unfortunate results. At the conclusion of the peace, however, the officers of the navy were unanimous and urgent for the immediate adoption of a better system, and various suggestions were offered to the Admiralty, as to the best method of proceeding. Assuming, as appeared most probable, that our ships would be almost entirely in port, some recommended an exercising ground at each naval arsenal, in which the crews of the guard-ships, &c., might be regularly trained: others preferred a ship fitted for this purpose; but all concurred in the necessity of establishing some uniform practice. In 1817, Sir H. Douglas, an officer who combines an hereditary interest in the welfare of that service which owes so much to his father, with all that science and experience in war can afford, laid before the Board of Admiralty a most valuable work, containing a series of suggestions on this subject, which, if they had been properly attended to and acted upon, must have placed our system of artillery exercise on a very different footing from that on which it at present stands. It does not, however, appear that between 1817, when he first offered his manuscript work to the Board of Admiralty; and 1819, when he requested their permission to publish it, any attention was paid to the

valuable suggestions with which it abounds, beyond issuing by authority a sort of uniform manual exercise for the great guns; and until 1827, when His Royal Highness the Duke of Clarence became Lord High Admiral of England, I was not able to observe that any effectual steps were taken to introduce or enforce such a regular system of artillery practice, especially amongst our ships on the home stations, as might enable us to keep pace with the improvements rapidly introducing amongst our maritime rivals.

During His Royal Highness's administration, much was undoubtedly accomplished by his own frequent personal inspections of the ships in commission, and the attention he paid to everything which respected their artillery; but he was unfortunately, too short a time in office to establish any material or permanent improvements in this part of our system; and I cannot therefore do better, than give my readers in this place, and as nearly as possible in Sir H. Douglas's own words, a sketch of the plan which he, twelve years ago, suggested to the Admiralty—which at the moment appears to have been received with entire approbation—but which since that time, has not (as far as I can learn) been thought worthy of further consideration.

“When the navies of Europe, opposed to us in the late war, had been swept from the face of the ocean by the gallant achievements of the British marine, a period of triumphant, undisputed dominion ensued, during which our seamen were not in general sufficiently practised in the exercise of those weapons, by

which that dominion had been gained; but, in the pride and ease of conquest, were suffered, in many instances, to lose much of that proficiency in warlike practice which had been acquired in a long series of arduous service. No one seemed to doubt that the decided superiority which he had displayed in every action with a marine generally esteemed expert in gunnery, was owing to a degree of permanent perfection in our own system, which, animated by the well-known gallantry of our officers and seamen, would always insure us victory over the vessels of any other state, even in conflicts with superior force. Relying with too great confidence on this persuasion, we were led to despise expected foes whom we only rated on a level with those we had uniformly beaten; and to engage rashly in very unequal contests with the ships of a power, whose practice we have since found is not of that character which should render us satisfied with the condition, or indifferent about the improvement of our own.

“Reviewing carefully our naval actions with European enemies during the whole of the last war, and comparing them with the battles which were fought in that which immediately preceded, there appears abundant proof that the natives of Europe had very much deteriorated in the practice of gunnery. In the war which terminated in 1783, the damage which our ships sustained, even in combats with nearly equal force, was in general much greater than in the actions of the late French war. It appears, indeed, that even in the later periods of Napoleon’s reign, when he had certainly

effected considerable improvements in his marine, the state of practical gunnery was still so wretched, that we have seen ships, fully officered, superbly equipped, and strongly manned, playing batteries of twenty or thirty heavy guns against our vessels, crowded with men, without more effect than might easily have been produced by one or two well-directed pieces; and we have seen some cases in which heavy frigates have used powerful batteries against our vessels for a considerable time without producing any effect at all.

“The danger of resting satisfied with superiority over a system so wretched as this, has been made sufficiently evident. It consisted more in relative than in absolute excellence. We became too confident by being feebly opposed; then slack in warlike exercise, by not being opposed at all; and lastly, in many cases inexpert for want even of drill practice; and herein consisted the great disadvantage under which, without suspecting it, we entered, with too great confidence, on war with a marine much more expert than that of any of our European enemies.

“The *materiel* of our navy is in the finest possible condition. Our ships are greatly improved in every feature of strength and warlike quality. Our ordnance is the best in the world; every species of store and equipment is perfect. We possess excellent seamen, trained by the operations of our commercial navy. Our officers, many of them educated at public expense, are good navigators, excellent astronomers, and are full of energy, activity, and courage: but these elements and qualities are not sufficient to constitute a good *ship of*

war, unless the knowledge of warlike science and practice be added; and that in a manner to become immediately operative at the commencement of a rupture. The practice of a long war, and the talents of many distinguished officers, had formed some expert crews of gunners: but these benefits were partial; and we shall undoubtedly lose, in peace, all or much of that proficiency, unless we take special care; and shall have again to struggle through years of difficulty, only to attain what we may not only secure from decay, but most certainly further improve, and even render permanent. After many years of war had afforded us ample opportunities of practice, and yielded us many splendid victories, we were, in some instances, severely disappointed. Let us consider well what may be the case, when, after a long peace, we send out fresh commissioned ships, manned with untrained people, for immediate battle. How many gallant officers have gone forth, with splendid reputations and the sacred honour of the British flag, depending upon crews on whom no reliance could be placed, excepting for courage and self-devotion! I humbly endeavour to provide a remedy for this; and the reasons which I shall offer in support, will, at least, advocate the case of every man who has been, or who may be, exposed to such perils of character: and I take occasion to assure the officers of the navy who may peruse this work, that any remarks on public events which I may think it necessary to make in the course of my essay, are not quoted to criticise, but on the contrary to justify, or account for operations which were always

most gallantly undertaken, and which could not perhaps have been better executed, with the means and qualities they commanded.

“There cannot be any doubt of the vast advantages that would result from enlightening by theory, and training by practice, during peace, as large a proportion as we can of those who are to command and serve our naval ordnance in war. It is impossible indeed that we should be disappointed in the conviction we feel, that splendid advantages would result from such a measure. With men imperfectly trained, no nicety of practice can be attempted or expected. Many improvements which would appear simple, and might be easily practised by well formed artillerists, may be considered complicated and impracticable by people who may, perhaps, be quartered to their guns *for real action*, as one of their first artillery exercises. Thus I have often heard it enforced, that nothing that is not coarsely simple can be practised in Naval Gunnery, and that no innovations should be attempted; and the difficulty which my father experienced, even from officers, in procuring the adoption of locks, and many other improvements which he made in naval ordnance, are proofs how far the want of some general cultivation of the science and art of gunnery are impediments to the introduction of improvements, which, instead of being resisted, would be eagerly received, were our people taught to estimate them. What would now be the condition of our admirable land-service artillery, were it not for the institution which cultivates theory, and the system which has perfected the practice? It

would have remained far behind in the progress to improvement; and, instead of being the very best, might have been, perhaps, the worst artillery in Europe. Suppose that, at the commencement of war, instead of taking the field with a well-trained corps of artillery, we were merely to turn over multitudes of able-bodied men to that duty, (as is the case in our naval artillery) and hurry them off for action, without more training than may be acquired in the short interval between enrolment and real service; and, if after the interval of a long peace, under officers destitute of experience, unacquainted with science, and rusty in the practice of former wars.—To such a corps, much of that nicety of practice which is at present admirably and easily executed, would appear mere refinement, as impossible to be observed, as it is to introduce or hope for expert practice from our naval artillery, at the commencement of a war particularly. Should the improvement of Naval Gunnery be less an object of national importance, than the instruction and training of our *land-service* artillery?"

Sir Howard then proceeds to recommend the formation of Depots of Instruction for the purpose of instructing officers, master gunners, gunners' mates, and their crews; and truly observes, that no measure which provides merely for the drill of the men can effectually improve the service practice, for the mere dexterity of a few privates can do little unless directed by cultivated and well exercised intelligence on the part of the officers commanding, &c. He urges the strongest reasons for composing these depots exclu-

sively of naval officers and seamen, and goes on to propose that in the formation of this new corps we should first “engage a certain number of seamen expressly for the service of the gunners’ crew for periods of five or seven years; renewable at their expiration, attaching a small increase of pay to each consecutive re-engagement. The advantages held out to volunteers should be, that master gunners, gunners’ mates, and a certain number of seamen gunners, will eventually be incorporated; and that regular advancement in that department will hereafter take place according to merit; so that seamen gunners may, if they can read and write, consider themselves in the certain road to gain, according to their merit, situations of gunners’ mates, and master gunners of ships. Seamen gunners to receive 1*s.* 4*d.* per diem, and to share prize-money as gunners’ mates do now, or with some other rank, superior to able seamen.

“The practicability of forming such an institution resolves itself into this—whether, upon these advantages being made known, a sufficient number of volunteers can be procured to commence such an establishment. The experiment might be easily tried; but the proposal should be accompanied with an explanation that the system provides, eventually, a term of relief, or residence on shore, for men so incorporated. If the experiment answer the confident and authorized expectation that may be entertained of its success, a selection of naval officers, the best practitioners of the late war, should be named, to conduct the Depots of Instruction; and I have every reason to believe that

some very distinguished officers would come forward to commence such a system. In this way a number of trained men would always be retained in the service—successions of commanders, and many officers who cannot be employed afloat in a limited peace establishment, would, at the trifling expense of full pay, be improved in this important branch of their military duties; master gunners and gunners' mates would be trained; and a permanent stock of seamen gunners brought up, to fill hereafter these important offices; and should it be extended ultimately in the manner I propose, it would furnish besides a considerable number of very expert captains of guns.

“When a sufficient number of men are procured to form one depot of instruction, a proportion of officers, properly proficient in a course of gunnery, and in a general system of exercise, should be appointed.

“One captain, three or four lieutenants, and a certain number of midshipmen, master-gunners, and gunners' mates, should be nominated to a division; and if the experiment succeed, other divisions of instruction should then be established at the principal arsenals, and the whole placed under the superintendence of a Rear-Admiral.

“All seamen gunners should be made perfectly acquainted with the duties of every man, in the exercise of all natures of ordnance, with reduced complements as well as with the full crew; so as to be perfect masters of every fresh arrangement that may be required to replace casualties.

“A level space proper for a good range should be fixed upon, and a sufficient number of guns and car-

ronades mounted in batteries similar to ships' sides, and consequently placed at various and corresponding heights above the horizontal plane.

“Young officers, master-gunners of ships, and gunners' mates training for these important situations, should be instructed in the following matters:—the names of the different parts of a gun and carriage;—the dispart in terms of lineal magnitude and in degrees, how taken;—what constitutes point-blank, and what line-of-metal range;—windage, the errors and loss of force arising from it, showing also the importance of preserving shot from rust;—the theory of the most material effects of different charges of powder, applied to practice with a single shot, also with plurality of balls, showing how these affect accuracy, penetration, and splinters. Gunners of ships should also be qualified to judge of the condition of gunpowder by inspection; to ascertain its quality by the ordinary tests and trials, as well as by actual proof; and these, as I shall show hereafter, are very indispensable qualifications.

“Master-gunners should also be instructed in the laboratory works required for the naval service—such as making rockets for signals; filling tubes, new priming them in particular; making and filling cartridges; precautions in airing and drying gunpowder; care and inspection of locks, choice of flints, correct mode of fixing them, &c. &c.

“The officers, master-gunners, and those training for such situations, will then proceed to the practice of gunnery, together with the seamen gunners who may have been previously instructed in the exercise.

“The practice should be taught, with every degree of precision, at the range on shore, in order to show the actual ranges of ordnance, when not affected by the motion of a ship, and thus discriminate between the errors of gunnery, and those which necessarily arise from the floating motions. Elementary instruction in practical gunnery cannot indeed be properly given *afloat*; it is absolutely essential that the principles of the practice be shown *on shore*.

“Practice should first be taught with the different natures of naval ordnance, single shotted, at point-blank distances, with the service charge; then at line-of-metal ranges, and at some intermediate and greater distances, against large targets or screens, some the height of single, others of two-decked ships, and fitted with poles to represent, in height and position, the masts of an enemy. This, for reasons that will be given in Part IV. when we come to treat of the practice, is very important. Practice should then be made at the same distances with *two* shot, to show the great uncertainty of this practice at long ranges; and with reduced charges, to show the corresponding ravages that may be occasioned by splinters.

“Practice should then be carried on, at every hundred yards from 100 to 1000, with all natures of guns and carronades in ordinary use, to show their comparative merits and powers, in regard to accuracy and other effects. Instruction should also be given in mortar practice: and in shell practice from guns, with common shells and also with spherical case.

“ When expert in the school practice on shore, the gunners should practise afloat from a hulk kept for that purpose at each depot. They will thus learn the comparative uncertainty of naval fire; and, consequently, be prepared to receive and observe this important maxim—that minute accuracy and intelligent quickness are more essential in Naval Gunnery than in the land service; for although it may not be possible to attain equal precision, yet every approximation that can be made towards it by expertness or simple expedient will tend in some degree either to correct or reduce those errors which arise from the floating motions.

“ As soon as one set of seamen are returned complete in exercise and practice, they should be transferred to commissioned ships, and there drill the seamen engaged in the ordinary way, according to the general system; so that in this respect they would be as well trained, at least, as by the contemplated plan; and all the permanent advantages of the proposed system would be so much gained.

“ Fresh seamen should be engaged as gunners, and drawn into the Depot of Instruction, in proportion as trained men are turned over to the guard-ships. These again should, by degrees, transfer to the cruisers a certain proportion of the trained gunners, that will have been received from the depots; which however should, together with the guard-ships and home cruisers, always retain a sufficient number of trained men for new commissioned ships, in the event of sudden armament. In this manner vast facilities and advan-

tages would be experienced in fitting ships, and in rendering them more immediately efficient. The plan now suggested would provide people not only qualified to assist in fitting the ship, but also to assist in working her; not only qualified to drill to gunnery the fresh hands—but to examine and arrange all the ordnance equipment—and very soon to make that ship, if properly commanded, *a good man of war*.

“ In all departments of warlike organization depots are allowed to be the very hearts of the system, by which improvement is cultivated, circulated, and established. In all services this is recognised and observed; no body can be permanently good, no system uniform without them. It is to this general measure that the service efficiency of every branch of our army is mainly to be attributed. It is this which supports the uniform systematic excellence of the whole machine, however remote some of its parts may be. It is from a similar system, connected with the naval profession, that the marines are what they are; and which has so much improved, perfected indeed, the Marine Artillery. If instead of applying it to naval artillery duties, a corps of naval gunners had been formed, composed of seamen and officered by a succession of naval officers, there can be no doubt that its proficiency would be equal to, and its utility, as Naval Artillery, infinitely greater than that of the *Marine* Artillery. Detachments of this corps were embarked on board the ships of the squadron that were sent out last summer on a cruise of exercise and practice; and it is no uncommon thing for naval

officers fitting out ships to apply for detachments of Marine Artillery to drill their seamen to the gun exercise. If such detachments had been or could be drawn from a permanent body composed of *seamen-gunners* trained by *naval* officers, instead of marines, can there be any comparison between the influence of the two systems on the practice of Naval Gunnery? If the squadron in question had been to sail on real service instead of a peaceable cruise, which system would have been most efficient? The Marine Artillery have their peculiar duties; but to extend them to any interference with *naval gunnery* would be most injurious. For the same reason that the Marines have their divisions, the Royal Artillery their schools of practice, and every regiment its depot, *naval gunnery* should have its permanent seat of instruction, and store of trained men. The advantages that would result from such an establishment are beyond calculation. These depots would become the resorts of zeal and talents—the nurseries of improvements; vast numbers of young naval officers of all ranks would resort thither at their own expense. Such is precisely the opportunity which the naval service wants in this branch of the profession. Improvement might then be cultivated without pursuing it through other departments, as at present;—naval officers would find a field open to them, which is now occupied by others. Courses of practical instruction might be given to any number of young officers who might choose to attend. *Naval gunnery* would become, as it most certainly should, an organized department of the naval service,

under the direction and control of the naval administration ; and I feel most enthusiastically certain, that this simple measure would lay the foundation of a system which would soon be cultivated to perfection, by the professional genius and zeal which it would call into action.

“ As to the extent to which this plan may be carried, present expense and future circumstances must be consulted ; but the system might be commenced without incurring charges of consideration sufficient to defeat this great national object.

“ The merits of this plan do not depend upon the limited extent to which we may be obliged to confine it, at present, on account of the difficulty of making financial provision for a more general operation. If it be plainly calculated to do some good, it should not be rejected, because, for contingent reasons which attach not to its merits as a system, it cannot at present yield its full benefits. If it be capable of training people sufficient to furnish master-gunners, gunners' mates, and captains of guns for half the number of guns (i. e. a fighting side) of ten sail of the line and thirty frigates, (about 1000 men,) it should not be abandoned because, on account of the expense, it cannot supply double the number. The adoption of a good sound system is the present consideration, not its immediate extension. If we found our measure upon a good professional principle, the super-structure may be raised gradually, in proportion as we may require it. The question for consideration is, whether the plan which is suggested does not provide a good

professional system for instructing officers, midshipmen, master-gunners, and gunners' mates; for training a proportion of seamen as captains of guns, as well as for drilling seamen engaged in the ordinary way: whether such a measure would not eminently tend to encourage the professional cultivation of artillery knowledge, forming a good sound system, in which extension of benefit may be made to accompany extension of force. If it promise such advantages, it will be cheaply purchased by any expense that may attend it. Were it an experimental measure that could not be commenced, without first committing the country to vast preparatory expense, we might hesitate about making the trial; but the system may be instituted at a rate that would not amount to the expense of adding a 20-gun ship to our establishment.

“If, by way of commencement, *one* depôt were formed, the following is an estimate of the expense:—

	Average half pay per day.	Average full pay per annum.	Diff. of ex- pense per an.
	<i>s. d.</i>	£.	£.
Captain	12 6	552	324
4 lieuts.	{ As the average full-pay very nearly balances the half-pay of 6 <i>s.</i> a day, it is proposed to pay the lieutenants as 1st lieutenant of ships, viz. 11 <i>l.</i> 10 <i>s.</i> per mensem, on account of the expense of living on shore.		
	6 <i>s.</i> each	138 <i>l.</i>	114
30 midshipmen at 3 <i>l.</i> 9 <i>s.</i> per mensem		. . .	1345
Lodging 1 captain at 12 <i>s.</i> per week		. . .	31
4 lieutenants at 10 <i>s.</i> per week		. . .	104
			<hr/> 1918

	Brought forward	£1918
Lodging 150 1st gunners at 1s. 4d. per day		. 3650
150 2nd gunners at 1s. 2d. per day		. 3193
Provisions for 300 gunners, rate not known		
Expense of hulk for reception of 1 lieutenant, 30 midshipmen, and 300 gunners		
Total, exclusive of the two last items		£8761

“As the Marine Artillery *is* established, some of their best non-commissioned officers should at first be attached to each Naval Depôt as drill-masters; but hereafter, these situations should be held by some intelligent seamen-gunners, to be called *acting master-gunners*, to receive 4*l.* 12*s.* per mensem, (the pay of gunners to sloops,) and to be promoted on proper occasions, to master-gunners of ships.”

If these arguments fail to convince my readers, none that I can offer, will I am sure be more fortunate; I will therefore only add, that up to the time I write (1829) I cannot discover that the slightest attention has been paid to Sir H. Douglas’s recommendations by the Board to whom they were addressed; but in France, on the contrary, it appears that this work having been considered by the government as of great value, has been translated, and is now used as a class book at the schools for the instruction of naval gunners, established in some of the chief naval arsenals in that country, agreeably to its suggestions.*

* See Preface to the second Edition, and remarks by the French translator and Editor.—Paris, 1826.

The Excellent was commissioned in 1831, and Sir H. Douglas’s plan fully carried into execution by Sir T. Hastings.

Having thus pointed out (more in sorrow than in anger) the principal defects which I have remarked in our naval administration for the last fifteen years, (the annual expense of our navy during this period being rarely under five millions,) let us turn our eyes towards those nations, whom (without forgetting that there exist other considerable maritime powers) we have been usually accustomed to consider our most formidable rivals. To begin with France:—The termination of hostilities found that country in nearly the same state as ourselves with respect to the “*materiel*” of its marine, which, from the peculiar circumstances under which most of their ships had been constructed, was in 1818 rapidly falling into decay, when the government of that country, after the withdrawal of the allied armies, had first leisure to turn their thoughts to naval affairs. They appear to have very soon directed their attention towards the construction of a superior class of frigates, in imitation of the Americans; and although their first experiments did not fully succeed, owing I apprehend to their falling into the too common error of putting more guns and weight of all kinds into them than they were calculated to carry, a very curious and important book published in 1822 by a French naval architect (Tupinier) is full of the most interesting details of their progress during this interval, and clearly develops the system on which their naval administration intended to proceed. Without entering into technical and professional duties, which might fatigue my readers, I will shortly state the most important features of the new plan.

It is assumed that the application of steam to the purposes of maritime warfare, will render it almost impossible for us in future to blockade the ports of France, or to insult its coast, as we have done during former wars. They argue therefore that France having now but few colonies, and their foreign trade with them being comparatively unimportant, it can no longer be an object to assemble large fleets, for the protection of their coasts or commerce, and that their principle in a war with England should be rather one of universal annoyance and attack on our most vulnerable and distant foreign possessions. It is suggested therefore to turn their chief attention to the construction of very superior and powerful two-decked ships, carrying like the Americans from ninety to one hundred guns, possessing the best qualities of sailing and stowage, (six months' provisions and four months' water,) and calculated to accompany and strengthen the flying and predatory squadrons of frigates, (also of the largest dimensions,) with which it is proposed to assail and harass our colonies and commerce in every quarter of the globe.

That this system has been actually adopted by the French Government, and steadily acted on since 1822, is clearly proved by the speech of the Minister of Marine, M. Hyde de Neuville, in the debate which took place in the Chamber of Deputies on the Navy estimates for 1829. It there appears that since 1822, the number of ships of the line had been diminished to fifty-two, but the frigates had increased to seventy-three, and that a very great proportion of the latter

were of the largest classes, being either seventy-fours *razéed*, and carrying thirty-two pounders, or ships equal in size to the Americans, and built on the same principle of decided superiority over those eighteen-pounder frigates, with which our naval arsenals unhappily abound.

I understand also, that while we have for so long a period disregarded everything like exercise or evolution amongst our ships in commission, the French Government has been in the constant habit of assembling their ships, intended for foreign stations, at Brest previous to their departure; that they have then proceeded in company to some central point, such as the West Indies, Rio de Janeiro, &c. &c. before they finally separated for their several destinations; profiting of course by every opportunity which such a system affords of instructing their officers in naval evolutions, signals, artillery practice, and general discipline.

I will only ask, which of the two naval administrations appears to be conducted on the best and wisest principles; whether it ought not to be apprehended that great supineness on one hand, and great attention on the other, may, before many years are passed, very materially change the former scale of relative inferiority? and whether our brilliant successes in 1797, 1798, and 1805, when our own navy was in the highest state of discipline and preparation, and those of our opponents in the worst, can justify our neglecting in 1829, all the precautions which are more than ever necessary to secure our future superiority?

With respect to the American navy, the comparative size of their ships of the line, frigates, and corvettes, is

now so universally known, that I shall content myself with two short extracts from a work just published by a very intelligent naval officer on this subject, (Travels in North America, by Captain Basil Hall, R. N.) in 1827, 1828.

“At the Navy-yard (at Gosport) there was a line-of-battle ship, the New York, (called a seventy-four,) of ninety guns, and the St. Lawrence, (called forty-four,) of sixty guns; the frigate is round-sterned, and they are both built exclusively of live oak, in a compact and apparently skilful manner.

“It occurred to me, when looking at these large ships, that there was no good policy in building such an expensive class of vessels; for other nations would of course profit by past experience, and avoid unequal matches in future.

“‘That is very true,’ said an American naval officer, who was present when I made this observation, ‘but we calculate in this way: in the event of a war with you, or France, for instance, it may happen that our enemy will have many times our number of ships such as these, but he will have a still greater proportion of smaller ships. If one of our frigates should chance to meet with one of yours of the same class, she must of course take her chance, and we trust she will play her part as becomes her; *but as the greater number of your ships are smaller ones of the old sort, the chances are more in favour of our meeting them, and if we do, the balance will tell on our side: thus in either way we hope to preserve the advantage we have already gained.*’”—Vol. iii. p. 83.

“In the course of the same morning, we visited the Delaware (called a seventy-four), lying fully equipped, and all ready for sea in Hampton Roads. Although not a very handsome ship, she is certainly a fine man-of-war, and apparently in good order. There were mounted, when I went on board, thirty-two long guns on the lower deck, forty-two pounders; on the main-deck thirty-two guns, thirty-two pounders; on the quarter-deck and fore-castle twenty-eight forty-two pound carronades, in all ninety-two guns; eight ports were left unoccupied on the upper deck, so that she may be said to be pierced for one hundred guns.

“The crew of the Delaware, as I understood from the officers, was seven hundred and seventy-seven, including one hundred marines: but eight hundred and fifty were mustered in all, the extra number being, I believe, supernumeraries for other ships in the Mediterranean.

“I went over the decks, passed through the wings, store-rooms, and into all parts of the ship. Every thing was in good man-of-war-like order, clean and well-arranged, and really surprising, when it is considered that she had been little more than two months in commission.”—Vol. iii. p. 88.

Let me now state shortly to my readers, what would too probably be the result, if unluckily a war should commence unexpectedly, and before we had sufficient previous warning to reinforce all our foreign stations with ships of proper descriptions.

Our present force, in which be it remembered nearly the whole of our best seamen are dispersed, consists

chiefly of those objectionable classes I have already so severely censured, and being consequently, whenever they are found, notoriously inferior to the enemy's ships in that part of the world, will in all probability be sought and attacked with all the confidence naturally resulting from the consciousness of superiority; and even if they escape capture, will be reduced to the humiliating necessity of a purely defensive system, until reinforcements arrive; while our merchant-ships will fall an easy prey to privateers, &c. The twenty-eight-gun frigates and ten-gun brigs, must inevitably be overpowered by any vessel of war (nominally of their own class) to which they may be opposed, and with which they cannot honourably decline an engagement; but what will be the feelings of the officers and men, whose blood and honour will have been thus wantonly sacrificed, and of their countrymen at large, when the light of truth breaks in upon the nation? when it is seen that enormous sums have been lavished on injudicious and inadequate preparations, and that after seventy millions expended in putting our navy into what was considered a perfect state of equipment, we have to throw aside the greatest part of our smaller ships, and again recommence operations;—will not the burst of public indignation be loud and tremendous, and will it be admitted as a sufficient vindication to allege that, in many particulars, the British Navy was far more inferior at the commencement of former hostilities?

Lord North, I recollect, after the appearance of the combined fleet in the Channel in 1779, boldly asserted

the impossibility of our hoping single-handed to outnumber the joint forces of France and Spain; but I do not think that in these days a minister will be found daring enough to hold similar language, and I conjure those on whom the fearful responsibility will rest, to beware in time, and not to suffer either an undue adherence to ancient systems, or that repugnance to wholesome changes and improvements, which, alas! is one of the strongest proofs of the imperfection of human nature, more especially as we advance in rank and age, to indispose them towards those measures, which the general spirit of the times renders so indispensably necessary.

If I am asked what practical suggestions I have to offer, and by what means I would propose to remedy the defects I complain of, without incurring an expense which the national finances cannot at this moment conveniently bear, I reply that I can only recommend our discontinuing, without loss of time, all further expenditure on any of these classes of ships which I consider so useless and objectionable; to suspend in a great degree the construction of ships of the line, (except perhaps one of the new class now in progress of ninety-guns on two decks, for the purpose of ascertaining their qualities by actual experiment before any larger number are laid down,) and to turn our thoughts chiefly towards those to which I have principally alluded in the course of these observations. I should recommend our satisfying ourselves by full and careful trial, whether the first and second classes of frigates, such as the *Barham* and *Southampton*, are in all

respects equal to the expectations entertained of them; especially whether the *razéed* seventy-fours answer so well as to justify the expense incurred in altering them. From these experiments, certain rules may be laid down for their stowage, trim, armament, &c. &c. and prevent that general uncertainty on these points, which must inevitably prevail, if they were hastily fitted out by officers unacquainted with their peculiarities, who could only try experiments which might or might not succeed, and would in the latter case occasion much disappointment and delay.

These experiments would necessarily lead to much of that increased exercise and experience afloat, which I so strongly recommend. It is only by seeing ships of different classes together, in all the various circumstances of wind and sea, that any correct opinion of their real qualities can be formed; and many of our younger officers must necessarily be completely uninformed in these particulars. I should therefore try together one or more of our first-rates, new eighty-gun ships, *razéed* seventy-fours, twenty-four and eighteen-pounder frigates; and as we have unfortunately a considerable number of almost new twenty-eight-gun ships, which in their present state are only calculated to disappoint and disgrace us, I should see whether, by converting them into corvettes, their sailing qualities might not be considerably improved, and they would at all events be reduced to their real denomination in point of force. A larger class of corvette, with sufficient breadth to carry heavy long guns, is however so indispensably necessary, that I should not rest until I

had succeeded to my full satisfaction in this particular. Here, such officers as Captains Hayes and Symonds, who are experienced seamen as well as excellent naval architects, would afford the greatest assistance; and I have no doubt that the second, if not the first attempt, would produce a most desirable vessel of this class.

The Americans say that their corvettes, armed with long twenty-four pounders for chace guns, will be able to beat off our eighteen-pounder frigates; and certainly if their superiority in sailing is equal to their extraordinary weight of metal, such an event is by no means impossible.

The French, I hear, are building some of nearly equal force; and shall we, while these improved and superior vessels are rising up on all sides around us, obstinately persist in our old system, until defeat and shame too late convince us of our error?

I further recommend entirely discontinuing our ten-gun brigs, considering them most inefficient vessels of war, and the expense they occasion, a most complete waste of the public money. A certain number of the eighteen-gun brigs, on the contrary, *as brigs*, would, I have no doubt, always be found very useful as small cruisers when judiciously employed, and kept chiefly on those stations (the West Indies, for instance, and the Mediterranean) where enemies vessels of their own class are principally to be found. To employ them indiscriminately in all parts of the world, or to keep them on the coast of North America, or in the Bay of Biscay during winter, could prove only that total want of consideration as well as professional knowledge,

which is most discreditable in the conduct of naval affairs.

Having thus satisfied myself that all our most important classes of ships were both fully equal in point of force to those which they would be expected to encounter, and also that they possess the indispensable qualities of fast sailing, stability, and stowage, I should then carefully avoid all unnecessary expenditure on those countless varieties, with which our dock-yards abound, and adhere steadily to those only with which I had full reason to be satisfied.

Our ships of the line might be confined to two or at most three classes, namely, first rates, like the *Caledonia*,* of one hundred and twenty guns—second rates, of ninety on two decks—third rates, of eighty-four guns; and our smaller seventy-fours, being so very inferior in all respects to the two-decked ships of other nations, it may be advisable gradually to discontinue them, converting some into frigates, if the result of the proposed experiments fully justify such an expense, and others into troop ships, for which service they

* I regret to hear that this beautiful ship is undergoing not only a complete repair, but a complete alteration at Plymouth; and that great fears are entertained of her former good qualities being totally changed by this injudicious attempt at improvement. An extraordinary experiment has also been lately tried on the *Royal George*, of one hundred and twenty guns, lately launched at Chatham; she has been *doubled with three-inch fir plank to increase her breadth*; forgetting apparently that, as fir does not last more than three or four years, her doubling will soon begin to rot, and if (as in all probability will be the case) the oak is infected, we shall have a new first-rate to take to pieces within five years after her launching.

would be admirably calculated. I should think two classes of frigates amply sufficient, and the large corvettes I have proposed, would replace with great advantage our innumerable pigmy squadrons of twenty-eights, ten-gun brigs, cutters, and so forth; because it must be recollected that the invention of steam will entirely change the whole system of maritime warfare on coasts, narrow seas, and rivers, and that instead of the swarms of small vessels with which we were formerly accustomed to protect our convoys in the British Channel, North Sea, &c., we must now rely almost entirely on armed steam-boats for the effectual performance of this service. It is therefore inexcusable to incur heavy expenses in the construction of vessels, which, after the first six months of war, will become totally useless; and it is for this reason that long heavy guns in all, even our smallest classes of ships, become of such urgent necessity.

I observe that in the French navy estimates for 1829, the minister of marine demands an extra sum of 7,000,000 francs for the express purpose of the construction of steam-vessels; but I have not yet been able to learn that our attention has been turned so seriously as the importance of the subject requires, towards any preparations for this new species of maritime warfare. Here I am afraid our old habits and prejudices again oppose the progress of improvement, and that while we look back with deep regret on those golden days, when an order in council directed that no two-decked ship should in future be built larger than the *Repulse*, and no frigate than the

Euryalus,* we cannot yet screw up our courage to try experiments with armed steam-vessels, trusting, I suppose, that sailing will last our time; but that in the event of any extraordinary emergency requiring it, we may be able to purchase a sufficient number of the Leith and Dublin traders to answer our purpose. It is very true this may be possible to a certain extent; but as it is the bounden duty of those entrusted with the conduct of public affairs to prepare against evident dangers, and not to lavish the public resources in guarding against those which no longer exist, why, may I ask, do we not reflect that we are misapplying the funds granted for naval purposes, when we employ them in the construction of vessels which are no longer required? and that half the sum expended since 1815 in twenty-eight-gun ships and ten-gun brigs, would have created a respectable flotilla of steam-vessels, and enabled us to try in time all those experiments with this new species of force, which appear now to be delayed until the emergency for its employment actually arrives? We have still everything to learn with respect to their equipment for war; and how many invaluable days and weeks will be lost, while (with all the mistakes and miscarriages inseparable from the want of full information and experience) we are hastily arming and fitting out a number of vessels constructed

* A small seventy-four and frigate, long considered at the Navy Board the most perfect ships of their respective classes. Forty seventy-fours were ordered to be built at one time on the model of the *Repulse*. They cost about three millions and a half sterling, and were all bad ships.

for other service, and but imperfectly adapted to the purposes of war.

I strongly recommend, therefore, that now, while we have still time and opportunity, such experiments may be entered upon on a small scale, and merely in the first instance with one or two vessels built by the best practical engineers, fully informed of the service for which they are intended, and the weight they are expected to carry, as may establish with sufficient precision the principal points which are of the greatest importance for our future guidance in this respect.

I am fully aware of the almost daily improvements in this wonderful discovery, and am therefore very far from proposing any indiscreet or expensive measures, which still newer discoveries might probably in a short time induce us to repent. All I ask is, that we should not persist in constructing those classes of vessels which we already see can never with any chance of success be opposed to steam-boats; and that with respect to the latter, we may only fully keep pace with the progress of discovery, instead of being dragged reluctantly forward in the wake of our more enterprising and vigilant rivals.

I shall close these observations with two more recommendations. Having already stated at some length the principal features of Sir H. Douglas's plan, I need only now urge its speedy adoption under such regulations and arrangements as would naturally suggest themselves to the experienced officers under whose guidance it would of course be placed; that

the valuable time we have already lost may plead loudly against any further delay, and that it may be recollected the sacrifice of one twenty-gun-ship annually will enable us to defray the whole expense.

I had earnestly hoped, in common with many of my brother officers, that advantage would have been taken of this long period of profound peace, to digest and introduce some material improvements into our general system of naval discipline; and that while our civil and military codes have been gradually and almost imperceptibly assuming a milder spirit, and becoming more in unison with the altered temper of the age, and with the general disposition which prevails amongst enlightened men, to govern, as far as may be possible, by reason rather than force—I had hoped, I say, that this important subject would not have escaped the attention of our naval administration.

I am fully aware of the difficulty and delicacy of the task, and that any undue relaxation of the reins of discipline might be to the full as dangerous and pernicious as the opposite extreme; but I cannot believe that in this, as well as in all other human affairs, there is not a happy medium by no means impossible of attainment; and remembering, as I too well do, all the occurrences which led to the fearful explosion in 1797, I feel doubly anxious that our system of discipline afloat should be so regulated and mitigated as to prevent, as far as possible, those sad instances of individual harshness and severity, which I would

gladly expunge from my memory, but which I have no doubt contributed very materially towards the subsequent discontents.

The present seems to me a most favourable opportunity for correcting our deficiency in this important particular. It is very remarkable that while the Act of Parliament by which our naval discipline is regulated, has, I believe, received no material alteration since its first enactment in the reign of George II., our successive codes of naval instruction have been almost entirely silent on this point, although often tediously minute on so many minor regulations. The effect of this omission has naturally been to leave too much to the discretion and temper of commanders; and fully disposed as I am to render ample justice to the humanity, kindness, and almost parental care, with which a very large majority of our naval officers are accustomed to treat those under their orders, yet it cannot be denied that there must, amongst so large a number, be others who, from mistaken zeal, want of consideration, early bad example, or ungovernable tempers, may fall into the same errors which, within my own memory, extended so widely.

This can only be properly guarded against by regulations issuing from authority, and laying down as far as may be possible, some uniform system with respect to offences and punishments, fixing the greatest number of lashes permitted to be inflicted without the sentence of a court-martial, suggesting minor punishments, such as solitary confinement, &c. &c., where they can be substituted, directing full

enquiry and deliberation before corporal punishment is inflicted, and, in short, inculcating the same rational and conciliatory spirit in the discipline of our fleet, which has, I understand, produced so gratifying an effect, since it has been generally introduced into the army.

Justice towards both our officers and men demands such a measure as that which I now recommend; and that while our civil and military laws are undergoing revision, and gradually adapting themselves to the more humane spirit of the times, our naval code should not be left the sole remaining monument of a less civilised period.

If the regulations I propose were embodied in the instructions, and couched in the discreet and temperate language which has characterised orders of a similar tendency issuing from the Horse-Guards, their good effects would be soon generally diffused through the navy, and an improved and more uniform system established in our fleet, before any sudden emergency obliges us to resort again to impressment, and to assemble hastily large bodies of seamen serving (at first at least) compulsorily and reluctantly, and whom it should be our first object to attach and conciliate. All who best know them will agree with me in asserting, that no class of men is so capable of strong gratitude and devoted attachment as our maritime population; and those who, like me, have remarked with heartfelt pleasure the ample return they have received for a steady system of kindness and consideration, will, I am sure, agree with me in depre-

cating all unnecessary harshness and severity towards them.*

It may perhaps appear to savour of personal or professional vanity, if I presume to attribute the remarkable perseverance in old systems, and the strong distaste towards modern improvements in naval affairs, on which I have so much animadverted, to the determined and apparently systematic exclusion of naval officers from those departments where it would naturally be supposed that professional experience and information must be indispensably necessary.

I am far from wishing to draw invidious comparisons, or to repine at the superior advantages enjoyed by our sister profession, which leads *to*, instead of excluding *from*, the highest honours of the state; yet I cannot but see that our naval departments are degenerating into political engines, and the smallest possible number of professional men permitted to take part in their deliberations.

Let me only contrast this system with that pursued in our military offices. At the Horse Guards the commander-in-chief is a general officer: all his staff, adjutant, and quarter-master-general, and their depu-

* The order directing that no corporal punishment should in future be inflicted except under a warrant, specifying the offence and number of lashes, was issued the latter end of 1830; but my views on this subject have been much more fully realized last year, by a most excellent circular issued from the Admiralty, Oct. 7, 1853, which, I trust, may be embodied in all our future regulations and instructions.

ties, military secretary, &c. are exclusively military. The secretary-at-war is a colonel in the army; the whole of the Board of Ordnance, master-general, lieutenant-general, surveyor-general, &c. &c. are all military men; not a single naval officer is admitted, although all the alterations and experiments on *naval ordnance* are tried at Woolwich, and (as I have heard), very great unnecessary expense often incurred from the want of that information which professional experience can alone afford; all the minor branches, comptrollers of army accounts, &c. are equally filled by valuable officers, whose previous habits peculiarly qualify them for the duties of their station; but when we turn our eyes towards our naval departments, what an extraordinary contrast do they present? Our first Lord of the Admiralty, two out of the four junior lords, and the two secretaries, can lay claim to no professional knowledge or experience whatever—thus forming a majority of five to two in the great council, where all naval affairs are decided. If we turn to the navy-office, a similar disproportion will be found. A distinguished officer is, it is true, comptroller of the navy; but the deputy-comptroller, the joint surveyors, and the accountant-general, are all unprofessional; and it is only at the bottom of the list, that we find two captains in the navy employed as store-keeper and superintendant of transports; although it is here that every thing which relates to building, repairing, modelling, and in short the whole detail of the *materiel* of our navy is supposed to be

considered and arranged.* I am quite aware that our surveyors of the navy are the naval architects of the department, and, as far as practice in our dockyards extends, are always expected to be regularly educated; but I must be allowed to doubt (and I think some facts which I have stated, will induce my readers to join me in entertaining those doubts), whether an education in which experience and observation at sea is considered unnecessary, can possibly produce a complete and thoroughly accomplished naval architect; and I cannot but attribute a great proportion of the mistakes on which I have animadverted to this glaring defect in our system—a defect which Mr. Yorke, when First Lord of the Admiralty, most wisely endeavoured to amend by the establishment of a school for naval architecture in the dock-yard at Portsmouth, where all young men looking forward to the higher employments in the naval yards, were to be regularly educated; and, after being thoroughly grounded in the mathematical and mechanical parts of the subject, to serve for a certain time afloat on board some of His Majesty's ships of different classes, and thus learn, by actual experience, the application of those principles in which they had been previously instructed.

How, during the existence of the school, this latter condition was constantly evaded, and by what influence the whole establishment was gradually under-

* The chairman of the victualling-board, which superintends not only that department but the medical staff of the navy, is a major-general.

mined, and has now fallen entirely to the ground, it is not in my power to explain. Perhaps my readers may think that this circumstance accounts for much of the affection for old routine which they must have already remarked. It is evidently impossible to expect that one officer at the Navy Board, and two at the Admiralty,* however laborious and distinguished for zeal and exertion, can superintend and direct, not only all that daily current business of their departments which requires a professional opinion, but the various alterations and improvements which equally call for attention. Under these circumstances, too much is inevitably left to inferiors, who pursue the beaten track in which they have been brought up, and too much is postponed until a more convenient season, which, alas! never arrives.

The Comptroller of the Navy, and the two junior Lords of the Admiralty, are also generally in Parliament, and consequently obliged to attend the House of Commons regularly during the session. It is therefore obviously impracticable for them to exercise that personal superintendence over various branches of their departments without which the public service nevertheless cannot be satisfactorily carried on. If they had sufficient leisure, or the assistance of efficient and competent colleagues, I have no doubt that many of the experiments and improvements which I have suggested would have been already tried. It is

* There have been four naval Lords of the Admiralty since 1830. Sir W. Symonds was appointed Surveyor of the Navy in 1831.

to our system therefore, and not to individuals that I impute blame; and until that system is changed or modified, and a few votes in Parliament considered of less value than the well-being of the British Navy, I confess I shall see but little hope of permanent improvement; being unable to understand on what other principle naval officers are excluded from naval employments, as, whatever prejudices may have formerly existed against them, they are now (if my own in their favour do not entirely mislead me) fully on a par with their equals in society in information and science; and on many remarkable occasions have shown themselves perfectly competent to the conduct of the most important affairs.

If any of those members of the House of Commons who watch vigilantly over the public expenditure, do me the honour to read these pages, let me advise them to scrutinise our navy estimates more rigidly than they have hitherto been accustomed to do; to call for more detailed accounts, and to ascertain satisfactorily in what manner the sums voted have been actually expended; whether in the repair or construction of those classes of ships which I have recommended, or in improvident and injudicious expenses on those of inferior and objectionable descriptions. Above all, let me advise them not to be silenced or mystified by any official replies which they do not perfectly understand, and to be assured that there is nothing mysterious or unintelligible in naval affairs, where a disposition exists to explain them openly and candidly.

The French minister of marine gives in a full return of the whole navy, specifying the state and condition of each ship, and the measures proposed to be taken with those requiring repair.

If a similar plan had been adopted here in 1815, and some little pains taken by independent members of the House of Commons to acquire correct information, I am sure many hundred thousand pounds might have been saved during the last fifteen years. It has often vexed me to see such warm and eager debates on the most insignificant items of the estimates, when I well knew that every ten-gun brig voted was ten thousand pounds thrown away, and so on in proportion with respect to the twenty-eights, &c.; but "the whale went after the tub," and these, which were the really injudicious expenses, passed without comment or observation.

I shall here conclude my Remarks in the earnest and fervent hope that they may, by exciting the public attention to the errors and omissions which I have endeavoured to point out, contribute, in some small degree, to avert the dangers to which I confess I cannot look forward without apprehension.

I am old enough to remember that, only fifteen years after almost as successful a war as that which we saw so gloriously terminated in 1815, Plymouth was blockaded by a superior fleet, and our ships of war at Spithead obliged to take refuge in Portsmouth harbour. This great national disgrace was entirely attributable to the impolitic and inconsiderate manner in which our naval administration had been conducted ;

and although I am far from intending to draw an invidious comparison, yet I cannot avoid recalling to my recollection both this fatal period and the commencement of the war of 1793; and fears will then arise in my mind, that even all this dearly bought experience has not produced the desired effect.

These considerations have induced me, however reluctantly, to undertake this painful task: I hope I may have performed it with a due regard for the feelings of those whose public measures I cannot entirely approve, but to whose zeal and integrity in their official capacity I render the fullest justice. If in the course of these observations I have misstated or mistaken facts bearing materially on my argument, I can only assure my readers that I have spared no pains to obtain the best and most accurate information, and from 1816 down to the present time I have been in such constant correspondence on this subject with my brother officers, both at home and abroad, and have so carefully rejected every circumstance of doubtful authenticity, that I do not think any of my important assertions can ever be seriously controverted.

If I can succeed in my object, my declining years will not have been unprofitably employed; and I sometimes fondly hope that an old officer, who has witnessed the reverses as well as the successes of the service to which he is still devotedly attached, may not raise his warning voice in vain.

SHORT REMARKS

ON THE

PRESENT STATE OF THE NAVY.

BY

REAR-ADMIRAL BOWLES, C.B., M.P.

SHORT REMARKS
ON THE
PRESENT STATE OF THE NAVY.

1846.

IT had been my intention to offer the substance of the following remarks in my place in Parliament during the debate on the Navy Estimates, but the many interruptions to public business which the forms of the House unfortunately permit, prevented the discussion of this important subject from commencing until near eleven at night, and it soon became apparent from the desultory character of the debate, and the comparatively unimportant matters brought forward by the principal speakers, that at so late an hour I had very little chance of a patient or attentive hearing, and that by persevering in my attempts to speak I might have risked the passing of the Estimates, which I knew could not be delayed without serious inconvenience to the public service. I, therefore, abandoned my intention; but having been very much struck by a remark made by one of the Members for Oxfordshire, who, in animadverting on the magnitude of the expenditure, and the conflicting statements of the Naval Officers on the subject, declared that the country was becoming thoroughly disgusted with the management of the Navy, and considered itself completely "*humbugged*,"

I saw more clearly than I had hitherto done, that the persevering efforts of those who, from personal and political motives, have been so long labouring to disparage and undervalue the exertions of those, who have been so earnestly and laudably employed in those great measures, which if steadily carried forward by their successors, must in a very short time place our maritime power on the most solid and satisfactory footing, had not entirely failed in accomplishing their object; and that it had become the duty of those who have only the interest of their country at heart, to do all in their power to dispel these dangerous delusions, and to place the real state of the Navy clearly before the public; and I have thought that no one could perform this service with more propriety than myself, because the situation I so lately filled has naturally afforded me the fullest opportunities of acquiring correct information on the subject I shall endeavour to discuss; while having become a member of the Naval administration at a comparatively recent period, I can claim no personal merit for the great improvements which have been commenced (and are rapidly advancing towards completion), since 1841, in all our Naval establishments.

The charges which have been brought forward by the assailants of the Admiralty have been so sweeping and general, that it is difficult to select any specific point with which a reply to them should commence.

If credit is given to them, everything relating to the Navy is in the worst possible state. Our new ships are even inferior to those old ones on which on

various occasions such unmitigated censure has been poured forth. Our officers are incapable—our seamen inefficient—our steam vessels unfit for active service—our civil administration equally defective—and, in short, our whole Naval system so lamentably out of order, that nothing but the appearance of some guardian angel can extricate us from our difficulties. Parliament and the country must determine what degree of credence is due to statements which, if well founded, are so alarming, and at the same time so discreditable to all those in whose hands the naval administration has hitherto been placed; but I feel very confident that the counter-statement I shall now proceed to make, will prove the charges I have enumerated to be either greatly exaggerated, or wholly without foundation; and as I intend to assert nothing which a short excursion will not enable my readers to verify for themselves, I will take up as little of their time as possible in my several explanations.

I will, in the first place, assert, without the smallest apprehension of contradiction, that our Fleet is at present in a far more perfect state of repair and preparation for immediate equipment than at any former period of our Naval history. Our arsenals are amply provided with timber and stores of every description, and the whole is arranged with such a combined view to the due care and preservation of the different articles during peace, and their instant and regular supply when required, that when all the timber sheds now in progress at the different yards are completed nothing will remain to be desired in that particular.

I believe the nation at large is very little aware of the immense improvements which have been going forward in all our Dockyards, during Sir R. Peel's administration. Preceding Governments had imagined that a single establishment at Woolwich would be found sufficient for the repairs and fittings of our Steam Navy, but further reflection proved that this arrangement would be found wholly inadequate to our future wants, and two additional factories, on a much larger and more complete scale, are now in progress at Portsmouth and Plymouth, which, when completed, will fully suffice for every service of this description to which we can reasonably look forward. These magnificent works are now in a forward state, and may fairly be referred to, as a most convincing proof, that the public money has not been thoughtlessly or injudiciously expended.

The Naval yard at Deptford, which, during the period of a too rigid and ill-considered economy, had been closed and useless, but which, from its proximity to the metropolis, and many other local advantages, will always be found a most useful and valuable establishment, has been placed in a complete state of repair and efficiency. New building slips, iron roofs, timber sheds, etc. have been constructed, and seven large ships of war may now be seen building or repairing, in a yard where not the sound of a single hammer could be heard in 1841.

At Woolwich very considerable improvements have been completed since that period. The yard has been increased by the purchase of nearly four acres of ad-

ditional space, which was urgently required for the extension of the steam factory buildings; and in addition to the enlargement of the basin, a new dock, iron roofs over the building slips, saw mills, storehouses, a steam hammer, and other improvements in the smithery, with machinery for the whole works, and generally the substitution of incombustible for combustible roofs and coverings have been added to this establishment since 1842.

At Chatham, the dockyard is enlarged by the addition of nearly 18 acres of land, recently purchased, which will give full space to complete all the arrangements now in progress for adding eight new building slips, two docks, and a basin to the existing establishment, and thus convert one of our smallest and dangerously crowded yards, into a first-rate building and repairing arsenal.

At Portsmouth, besides the new basin and steam factory, which I have already described, five new docks and building slips have been added to this yard, with iron roofs, &c. complete, as well as a new mast-house and boat-house, a chain cable store, a steam hammer, a large tank, with a full supply of water for any emergency; and, generally speaking, the same substitution of incombustible for combustible coverings, which I have already mentioned.

At Devonport, in addition to the steam factories and basins previously alluded to, and which, like Portsmouth, are on the largest scale, a new basin in the present dockyard, an additional dock, new iron timber sheds, a steam hammer, and various other general

improvements, of a similar nature to those already described, are in progress.

At Pembroke also, iron roofs over the building slips and timber sheds, have removed the constant danger of accidents from fire, to which we were previously exposed; and all the additional improvements and precautions already detailed in the other yards, have been fully carried into effect here, as well as the necessary repairs to the fort and battery adjoining.

I have thus endeavoured to explain, (perhaps too slightly and imperfectly), the many important works which have been commenced, and are still either completed or still in progress since 1842; and if my readers are at all aware of the magnitude of the preparations making in France for great naval operations, they will agree with me in thinking, that the honour as well as the safety of the country, and, above all, the preservation of the peace of the world, demanded corresponding exertions on our part; and we ought to be truly thankful, that those exertions have been called for and made, at a period when the wise and skilful administration of our finances, rendered these great expenses neither onerous or difficult to defray.

I propose reserving to the conclusion of this statement, a few remarks on the question of our improvements in Naval Architecture, which may, I fear, be less perfectly intelligible to my unprofessional readers than the remainder of my observations; and I will only assert here my entire conviction of the superiority of our new ships over the old ones in all essential points; and although I am by no means disposed to

maintain that we have at once attained perfection, or that they may not have defects, which should be guarded against in our future construction ; I am fully persuaded, that they will be found to possess many decided advantages over the former generation, and far better calculated to maintain our national reputation.

It may perhaps diminish the alarm which some of my readers have felt at perusing the unsparing censure, thrown by some of our Naval critics, on the whole Steam Navy of Great Britain, if I inform them that several discontented French officers, address precisely similar language to their own Government, whom they reproach with the great inferiority of their steam ships as compared with ours ! So easy a thing is it to find fault !

The truth is, that we are still in our infancy with respect to Steam, and that, although our ships are quite equal, (or perhaps superior) to those of other nations, no wise man will venture to deny the probability of great improvements being introduced in a very few years. In the meanwhile, the country may be assured, that our Steam Navy is in a very efficient and satisfactory condition,* and although amidst such complicated machinery and arrangements, accidents will occasionally occur, especially in newly fitted out ships, with which our officers are as yet comparatively unacquainted ; these occurrences deserve rather our sympathy and indulgence than to be blazoned forth to the world, with a malicious triumph and satisfaction.

* It has been nearly doubled since 1841.

I have heard with equal pain and surprise, the disparaging remarks on our officers and men, and their comparative inferiority, which have fallen from some of those, whose assertions I am now endeavouring to disprove, but I think I shall best reply to these unmerited reflections, by pointing to Acre, China, and the few but brilliant occasions in which they have had the opportunity afforded them of shewing that the blood of their ancestors has not degenerated in their veins. I can bear a willing and ample testimony to their increased and increasing education, civilization, and good conduct, and if any are found wanting in that professional skill, which during a long war none could fail to acquire, let us recollect the circumstances in which they have been placed during a period of profound peace, and the little care hitherto taken to train or instruct them in any important points. I hope and trust, that a squadron of exercise and evolution will henceforth be considered an indispensable part of our establishment, and accomplish the great object of inspiring our rising generation with energy, emulation, and an ardent love of their profession.

Our extraordinary proficiency in artillery practice (which it was at one time the fashion amongst our old officers to consider unattainable by sailors), affords the strongest proofs of the ability of our young men to conquer all difficulties when a fair opportunity is given them: and I cannot allude to this subject without expressing the deep obligations we are under—obligations which have never yet been sufficiently acknowledged—to Sir Howard Douglas, for those inva-

luable suggestions, which although presented to the Admiralty in 1817, were not finally adopted until 1831, but which, literally followed out when the Excellent was established, have, under the guidance of a most able and zealous officer, led to all our subsequent perfection in this great branch of our profession.

I wish I could say, with equal truth and confidence, that our arrangements for manning our ships on any sudden and unexpected emergency, were as complete as those which I have hitherto detailed with so much pleasure, but I have long considered this as the most defective part of our whole system : and my late colleagues in office are well aware, that I frequently and urgently pressed the subject on their attention. I now recommend it with equal earnestness to the immediate and serious consideration of my successors, feeling assured, that there is no real difficulty in recruiting the Navy as easily as the army, if the same extended and well arranged system is adopted, and placed in the hands of carefully selected and responsible officers ; we cannot, however, consider ourselves perfectly secure, unless we possess a larger reserve of trained men at our principal arsenals than has hitherto been thought necessary. A sudden attack (which steam renders much more probable than formerly), could only be successfully opposed and defeated by the steam flotilla actually on the spot at the moment, and which must be well manned for this purpose—while on the other hand, if a squadron for home service was to be rapidly fitted out, to replace

one proceeding instantly to some foreign station (a very probable occurrence), a corps of reserve would be indispensable for this purpose, while newly raised men were coming in.

I should advise, in combination with these measures, a complete revision of all our existing establishments, with the view of bringing every person employed in the Military Departments into a general arrangement for the defence of his own locality, which would enable him to repair to his post without alarm or confusion, and surely no better opportunity can be chosen for measures of this description than the present—when we are happily free from all apprehension of danger, and can proceed calmly and deliberately with such changes as the alteration in the state of affairs so obviously demands.

The present practice of disbanding and dispersing the crews of our ships after three or four years service, and when they ought to have attained a high degree of training and discipline, is, in my opinion, neither politic nor economical. I should suggest that ships returning from foreign service, in good condition, (not requiring more than two months repair) should not be paid off, but that the crews should have six weeks leave of absence, offering all those who had served above a certain period, their discharge or re-entry for another term.

Any men whose health had suffered in warm climates, or who, from other circumstances, were entitled to such an indulgence, might be allowed to re-enter, for a regulated period into the "*Reserve*," and such

an arrangement would be both just and considerate towards the seamen, and at the same time secure a constant supply for active service, as they would soon get tired of harbour, and eagerly volunteer for ships which they saw fitting for sea.

A certain proportion of the twenty-one years service which now entitles a man to a pension,* should, in my opinion, be *continuous* between the age of 20 and 35. Such a regulation must of course be *prospective*, but it would be attended with very good effects.

I will conclude with a very short notice of the question of the comparative merits of our modern and ancient Naval Architecture, which now engrosses so much attention, and occupies so many columns in our newspapers. I, for one, am quite ready and willing to admit the former inferiority of our Naval Architecture, and that for a considerable period after the conclusion of the war in 1815, we clung too closely and pertinaciously to our ancient maxims and prejudices, and by adhering too strictly to certain self-imposed and injudicious restrictions as to the size of our ships, and more especially their "*tonnage*," which we calculated by a fallacious rule, tending to check all increase of breadth, (the very point in which they were most deficient,) were in danger of perpetuating that inferiority which had already become so apparent in our engagements with American frigates.

It was impossible to convince the principal officers of our dockyards, who had never been at sea, and

* Perhaps seven years.

were therefore unable to comprehend fully the practical defects of which we complained in our ships, of the importance of swiftness combined with stability, and that the latter quality could not be obtained without that increase of breadth from which they shrunk with dismay; and it was not until the persevering and patriotic endeavours of the Duke of Portland and the late Lord Vernon, who at different times became personally responsible for the expenses of the first experiments under Sir W. Symonds's direction, had at last opened our eyes to the great importance of his suggestions, that a Naval officer was for the first time appointed Surveyor of the Navy, and emancipated our constructors from those fetters and prejudices which had so long obstructed the progress of improvement.

I will not detain my readers by many observations on this part of the subject. It is indeed a "*vexata questio*" which has been agitated almost ever since Sir W. Symonds's appointment, with such violence, personality, and want of all common courtesy and decorum on the part of his opponents, that it is disagreeable to discuss it; especially as no good reason can be given for assailing so vehemently an officer against whom no offence can be alleged beyond that of having endeavoured to introduce improvements into a system so avowedly defective, that a very large proportion of the ships built between 1815 and 1830, (and more especially the frigates) are now unequal to cope with those of other nations, from their great inferiority in size and force.

I will only add, that all the constructors, whose ships are now building, or already launched, have without exception adopted the principle of a great increase in their breadth.

I have thus endeavoured to reply as briefly as possible to the various charges which have been preferred against those who have until very lately been responsible to their Sovereign and their country for the administration of our Naval affairs; and I cannot but hope that the explanations I have given may convince those who peruse them of the inaccuracy of the assertions which have been so frequently and perseveringly brought forward.

My statement would, however, have been much more interesting and satisfactory if I had not considered it my duty to abstain from including in it any facts or details which are not accessible to the public, and only known to me in my late official capacity. I trust, however, that what I have already said, may be thought worthy of some attention and credit, and that the country will believe me when I assert that the Navy is in a most effective and well-organized state—that the rising generation of officers is far more scientific and better educated than the one which preceded it; while our seamen are evidently profiting by the laudable efforts which have been made for their religious and mental improvement, and are becoming soberer, steadier, and more attached to the service; and as I have alluded to the imperfections of our present arrangements for raising men, I ought to explain that the number actually serving

at this moment, so far from being deficient, rather exceeds that voted by Parliament; and might, I have no doubt, be very considerably increased without difficulty, if necessary.

This is, however, a great and important question, and one on which, as it will, I trust, receive the serious attention of our successors in office, I will not enlarge at this moment.

London, August 5, 1846.

SUGGESTIONS
FOR THE
MORE SPEEDY EQUIPMENT
AND
BETTER MANNING
HER MAJESTY'S NAVY.

BY CAPT. BOWLES, R.N. C.B.

SUGGESTIONS.

1840.

It is not, I think, necessary to take up the time of those who may peruse these pages, by arguments to prove the importance of the subject on which I have felt it my duty to address a few words to my fellow countrymen. No one who has attended to passing (and more especially to recent) events can be insensible to it, and when we see the principal Maritime Powers augmenting their fleets, and perfecting their arrangements, there can surely be no impropriety in reviewing our own system, and considering, while we have still time and opportunity, whether we are also advancing equally in the march of improvement, and adapting our measures to the various changes of circumstances which have taken place.

Before, however, I commence this discussion, I am most anxious to premise that I have not the slightest intention of imputing blame to any individual or department.—Our present mode of manning the Navy has existed under all governments during the last and present century, and, I trust I may be permitted to suggest some ameliorations without being considered to cast censure on those who have hitherto been prevented by a thousand difficulties, and more especially by those fearful words “INCREASE OF EXPENSE” from

effecting changes which would place our Naval organization on a more satisfactory footing.

I may perhaps be asked, why I have not submitted my suggestions to the Board of Admiralty, instead of laying them in their present shape before the public? and my reply is, that I am perfectly aware the same magical words to which I have already referred would have been used to convince me that my proposal was an impracticable one, and I have therefore preferred an appeal to those who are in truth the principal causes of the present evil, by their own injudicious clamours for reduction and retrenchment, and to call on my countrymen to untie the hands of the Admiralty, and to release the Government from engagements unwisely demanded, too hastily entered into, and too literally fulfilled.

It may perhaps also be asked what right have I, a single unit in a numerous profession, to offer my opinion at all on a subject which all will allow to be of such vital importance, and why I do not leave matters of this magnitude to the care and judgment of my superiors?

I answer, that the two greatest improvements introduced since the peace of 1815, have arisen from the suggestions of two officers, at that time wholly unconnected with office—Sir Howard Douglas and Sir W. Symonds—and, believing as I do, that our present arrangements for the equipment of our Navy are as defective, and calling as loudly for amendment as our instruction in Artillery practice, and our Naval Architecture, at the period in question; I see no

reason why an officer who has during forty-four years of service been more constantly in command, than perhaps any other of his rank and standing, and who has therefore enjoyed ample opportunities for forming a correct opinion on professional subjects, may not presume to offer that opinion in respectful and temperate language.

I am ashamed to have detained my readers so long with these preliminary observations, which I felt, however, were due to them as well as to myself; and I will now endeavour to lay before them, as clearly as I can,—first, the system we have hitherto pursued in manning our Navy during peace; secondly, the objections, to which it is liable; and, thirdly, the improvements I venture to suggest.

Nothing can be more primitive and defective than our present mode of proceeding.

A ship is required to relieve another for foreign service. She is selected, reported ready for commission, the captain and officers are appointed, and then volunteers are advertised for—They come in slowly and uncertainly, if the ship is a large one the men will not enter until the heaviest part of the work of fitting is completed, the equipment proceeds slowly and carelessly, because energy and rapidity are impracticable, but even then those who enter first feel they are unfairly worked, and the seeds of discontent and desertion are sown at the very commencement of their service.

Three or sometimes four months thus pass away before the ship's complement is complete, and in the

meanwhile little progress is made in discipline or instruction. She at last sails for her destination, and relieves a ship, which having been three or four years on active service is, or ought to be, in a high state of efficiency, but on its arrival in England it is dismantled, the officers and crew are paid off, and discharged, and we thus proceed on the plan of perpetually creating and as perpetually destroying what we have with so much labour and expense endeavoured to obtain—an effective ship of war.

The objections to this mode of proceeding are so numerous, but at the same time so obvious, that they will at once suggest themselves to my readers.

To the economists the improvident expense of keeping a ship intended to relieve another three or four months in commission before she can proceed, will be sufficiently striking; while professional men who view a ship also as a school for the rising generation, in which not only mere seamanship, but the higher qualities of energy, promptitude, and resource are to be taught, contemplate with anxiety and regret a slow and slovenly system, calculated rather to damp and deaden activity and exertion, and to train up the young beginner in exactly the way in which he *ought not* to walk, and wholly at variance with the first principles of all warlike establishments, discipline, activity, and instruction.

I will now proceed to detail the improvements which, if introduced, would, in my opinion, obviate all these inconveniences, and without any very material increase of expense, when compared with the paramount importance of the object in view.

My leading proposition is to consider a *Reserve* of, at least, 4000 or 5000 men for home service indispensably necessary.

The supply of seamen so little exceeds the demand for them, and that demand is so large and increasing, not only in the British Empire but in almost every quarter of the habitable globe, (the United States, South America, Australia, and India absorbing very considerable numbers) that except we have foresight and arrangement enough to secure a stock in hand, (if I may so express myself) we shall always be exposed to the greatest difficulty and danger on any emergency where circumstances may, perhaps, render our having recourse to impressment impolitic or unjustifiable, although the necessity for a reinforcement to some foreign station, or an increase at home, may be extremely pressing.

The events which have occurred within the last two months, sufficiently demonstrate the correctness of my assertion.

The French have been for some time endeavouring to outnumber us in the Mediterranean, and after the occurrences of July, it became extremely desirable to despatch the Vanguard and Rodney (both being ready for sea, and only wanting men) with the least possible delay; but volunteers came in so slowly, that not having, I believe, any disposable men elsewhere, above a month elapsed before these ships were completed, although the whole number required was probably under 500.

I will not enlarge on other recent occurrences of

a similar nature, which would very materially strengthen my argument, but confine myself to observing, that in the present circumstances of Europe, and viewing the matured and perfect arrangements of other Powers for the rapid equipment of their Fleets, no time should be lost in revising our own system, and more carefully adapting it to the existing state of affairs.

The number of men I recommend keeping as a permanent reserve, large as it may at first sight appear, would be barely sufficient to equip a respectable squadron for the protection of our coasts and commerce, and to enable the Board of Admiralty to commence a course of exercise and instruction afloat, which has been too long postponed and discontinued. Few officers of the rising generation have ever witnessed the evolutions of a fleet, or received any practical education in naval tactics. Our foreign squadrons are so constantly separated, and so widely detached for the protection of trade, that it is scarcely possible ever to assemble them, and it is therefore principally at home, where no other considerations should be allowed to interfere, that this most important part of the education of every officer can be carefully attended to.

The result of the proposed arrangement would be, that instead of six nominal ships stationed at Sheerness, Devonport, and Portsmouth, but unmanned and wholly ineffective, we should have six fully manned, disciplined, efficient, and ready at twenty-four hours notice to proceed to any part of the world; while an equal number of frigates might be kept in the same state of preparation for any service not requiring ships of the line.

Our Naval Arsenals, instead of being as they now are, schools of idleness, in which officers are allowed to serve out their sea time (as it is called), without ever seeing an anchor weighed, or a sail set, would then become excellent Dépôts of Instruction, and there appears to be no reason why the routine of foreign service might not be taken by the whole Navy in commission, shortening the periods of absence, especially in unhealthy climates, and withdrawing our younger officers, as far as might be practicable, from the temptations to extravagance and dissipation, inseparable from a long confinement at Malta or Lisbon.

The confidence which a respectable reserve at home must give to any Naval Administration, would very probably tend much, on many occasions, to diminish the necessity of keeping so large a permanent force abroad, knowing as they would do, that well disciplined ships were constantly in readiness, and that not a moment's delay need elapse in despatching reinforcements when called for.

Sir Thomas Cochrane communicated some years ago to the First Lord of the Admiralty,* and has since printed for private circulation, some observations so nearly resembling, and so perfectly coinciding with my own opinions, that, I hope, although I have not at this moment an opportunity of asking his permission, that he will not object to my quoting some very striking and excellent passages from his little pamphlet in corroboration of my own assertions.

“ At a time when a peace of ten years' duration has

* To Lord Melville, in 1826.

reduced the number of ships in commission, as well as the proportion of men employed in them, to a force that formerly constituted but a small squadron, it becomes desirable to know how far the services of that force are available in the event of any unforeseen rupture—and in the persuasion that there is no person more alive to the best interests of the naval profession than your Lordship, or more convinced of the necessity of the peace establishment being in an efficient state for war, (however much we may hope for a continuance of the blessings of peace for many years to come,) I venture to address a few observations to your Lordship, being the result of nearly four years and a half's service and experience in the command of a ship upon the peace establishment.

“ I do not know whether it has or has not reached your Lordship, but it is no less true, that notwithstanding the few men employed, there is a general complaint as to their inferiority, and not one captain in ten that acknowledges his having a crew with whom, either in strength, quality, or character, he is at all satisfied; and, moreover, that although these men enter voluntarily, desertion is carried on to an extent never known in time of war. For this there cannot but be some cause, and I think it may be traced to the mode in which the peace establishment is at present conducted. When a ship is first commissioned, men are brought together from wherever they can be collected—unknown to the officers as well as to each other: after their ship shall have been nominally ready for sea, (which is seldom under four, five, or six

months,) she yet has a great deal to do with respect to her equipment and her internal arrangement, and it is still some months more before that most necessary part of their instruction is taken in hand, their gunnery, and on which the Admiralty have most justly laid considerable stress ; and there is no captain who has been employed during peace that will not tell your Lordship that he did not consider his ship in all points an efficient man-of-war until she had been from twelve to eighteen months in commission, and particularly in relation to the management of her guns. However anxious a captain may be to have his ship perfect in that respect, he at first meets an obstacle at every step : to exercise the guns, as they ought to be, breaks in upon the whole day's work ; it is therefore postponed from time to time, and just enough exercise performed to fill up the quarterly report. I believe I exercised more in the *Forte*—certainly fully as much as any ship in the navy, and to which I was led from my anxiety to give Congreve sights (a complete set of which I had managed to obtain) a fair trial, and seldom anchored anywhere that, if time permitted, I did not put out a mark to fire at, and I know, by experience, what an inconvenience attended my first doing so.

“ About the period before mentioned, a ship becomes in all respects in a state a man-of-war ought to be : the men know and agree with each other, they work together, and are comfortable in their messes ; the drudgery of the exercise of sails, guns, arms, &c., is over, and desertion ceases, and the officers begin to reap

the benefit of their exertions. The ship being complete in all respects, the exercising of guns, sails, &c., goes on regularly and without interruption; and this continues for a twelvemonth or a little more, when the prospect of paying off comes in view, and then discipline, exercise, &c., begin to relax, and, if at home, the ship is paid off at the end of three years, and all belonging to her dispersed. Re-commission this ship the next day, and she is perfectly a new creation, and the same routine to be repeated already stated to your Lordship. The men who were lately in her have no more inducement to return to that ship than any other, as she is but the shell they formerly inhabited; and although a crew may be collected, all of men lately serving in a man-of-war, yet you will have the same complaint from the present as from her former captain, as to their inefficiency and want of union, and the same discontent will for an equal period exist, and the ship be in a similar state of inefficiency for a similar length of time.

“I have always considered that a peace establishment was as much a preliminary preparation for war as for any other service; that consequently, your ships thus employed should be manned with picked men, and that they should be in that state of training and efficiency that each ship, on a rupture taking place, could turn over one watch to form the groundwork of another vessel to be fitted out. To accomplish this much-desired end, allow me to suggest to your Lordship the following plan.

“That when a ship is commissioned, she should never be entirely paid off—that if the ship herself be-

come unserviceable, that the whole be transferred to another of equal size—let the captain and officers be appointed for the period they are now kept in employment, and the men be entered for a period not under five years, and as much longer as they please; and instead of paying off altogether, the captain, officers, and men be discharged respectively as their period of service expires; and that if the ship be employed on a foreign station, the men whose time is up, and who wish their discharge, to be sent home in the first man-of-war, or allowed to find their own way.

“The advantage to be derived from this plan I conceive to be the following: first, that as before-mentioned, at the end of eighteen months, the ship’s company have become known and attached to each other—they have got over the drudgery and annoyance of fitting out—of exercising in all its various branches—and have only to keep the ship in the state she is then in; there is no general looking forward to discharge. In a frigate of a complement of three hundred, after the first four years, the number to be discharged will be about three per month. Supposing a ship is out five months, and, returning into port, discharges fifteen men, these men, instead of going on shore in a herd with two or three hundred others, without a home, or one place more than another of which to make choice, each encouraging the other in every species of dissipation and vagrancy, they are landed with the knowledge that they have left a home where they might have remained and continued in the enjoyment of every comfort; they have no multitude to keep

them in countenance in their debaucheries, and the want of old associates soon makes them tired of their present life, and cast an eye to the home and mess-mates they have left; but they know too the ship is but fifteen short of complement, and that their places may be filled up; and I am much mistaken, unless the ship has something in her that makes her very unpopular, if ten out of the fifteen do not return, or if, before quitting her they do not give in their names to return again after their cruise is out. It must be quite clear to your Lordship that any man would rather return to a comfortable, well-regulated mess of old acquaintances, and the drudgery of equipping over, than go where he would meet none but strange faces and all the vexation of first fitting out. Even the new men, who are to supply the five the ship is now short of, will instantly partake of the comforts of the rest of the crew—they will in a few days fall into the mode of discipline preserved in the ship, and be as expert at their duties as any others of equal talents who may be on board; and here another advantage, with respect to discipline or the mode of carrying on duty, will be obtained. It must be well known to your Lordship, as it is quite notorious, that there are almost as many systems of carrying on duty as there are officers in command; and that men, on first coming together, are for some time at a loss to find out the system to be observed; but if a ship has been commanded by an officer of any professional talent for three years, and shall have been brought to that proper efficient state a man-of-war ought to be in, it is

impossible but his successor will more or less follow the plans heretofore adopted ; for whatever his fancies and caprices may be, he must be devoid of all sense to entirely overturn a system that has been pursued with success ; and while he tries to bend others to his ways, he insensibly falls into those already adopted, and neither officers nor crew will feel that change which they inevitably must do in joining a newly-commissioned ship.

“ With respect to desertion—which is now carried on to a most extraordinary pitch—I am quite persuaded the want of comfort on board a newly-commissioned ship has much to do with it. In corroboration I may mention, that three weeks after the *Forte* was paid her advance, on being first commissioned, she was obliged to be docked at Portsmouth, and during that period she lost fifty men. I was told I only met the fate of others ; but fearing that the cause might be dissatisfaction, either at the conduct of some of the officers, or discontent with my own, I privately sent for some of the oldest petty officers on several occasions, and begged them to tell me fairly if any cause of complaint existed, when they assured me that none whatever did ; that they had no fault to find with my arrangements, nor with the conduct of the officers ; and although they could give no satisfactory account for the desertions, yet they allowed the people were not happy among themselves—that they were new to each other, and constantly quarrelling ; and I am quite persuaded that this accounted for most of the desertions that had taken place. The attachment of

men to ships to which they have for some time belonged is very great, and I entertain little doubt but many would serve their whole time in the same vessel.

“ If any difficulty should be started with respect to ships on foreign stations being able to replace the men they occasionally discharge, it would be quite easy to supply them with volunteers by the ships from time to time joining the station from England; not that I consider such to be necessary, as there is no want of men abroad with whom to fill up the vacancies that may occur, even should most of the men take advantage of their discharge, which I am persuaded would not be the case. On this system being first adopted, there would be a little inconvenience at the end of the first five years, as many having entered at the same period would be entitled to their discharge at the same time. To remedy this, I would recommend discharging, at the end of the first three years, a certain portion of such as did not intend to enter again for a second term, after which, the entering and discharging would proceed regularly. The army did formerly enlist men in a very similar way, and found no inconvenience from it; but what state would each regiment be in, if disbanded at the end of every three years?

“ I will offer no apology for having troubled your Lordship at length on a subject of such vital importance to the naval profession and country at large. I only earnestly request your Lordship’s attention to the hints I have thrown out, as, if they strike you as they do myself, I am persuaded in the detail you may so much improve upon them, as not only to secure to the

service a better class of seamen, and in a great degree check desertion, but to reap advantages for the efficiency and discipline of our fleets that have not entered into my contemplation."

If the system on which the Army recruit was more closely followed, volunteers would be raised for the Navy much more rapidly and satisfactorily; a more respectable set of officers and men would perform this service with greater credit to themselves and their profession. Pensioners carefully selected, and encouraged, exhibiting in their own persons the reward of long service and good conduct, would be the best class of men (under proper officers) for this purpose, and if my suggestions shall be thought worthy of attention, I see no reason why tall, active young landsmen, between 18 and 22, and not under 5 ft. 7 in., should not be admitted into the *Reserve*, and raised in the Inland Districts as well as at the Sea Port Towns.

Six months of instruction and discipline at Portsmouth, Devonport, or Sheerness, would make these very useful men, especially when the want of strength in our ships' companies during peace is considered, the merchant service taking the most powerful men, and refusing the small ones. We see how well our new system of taking boys answers, and how soon they become valuable seamen, but this might be still further improved, by having at each Port a small frigate fitted on the plan of the Marine Society's ship at Deptford, with guns and sails, in which the boys might be better looked after, and receive some schooling, and where the young landsmen might also be sent to improve

themselves, when exercising on board their own ships was inconvenient.

It is very interesting to observe how soon the Marine Society boys, few of whom have ever seen a ship in their lives, become extremely smart in crossing top-gallant yards, furling and reefing sails, &c. ; and there is not the least reason to suppose that lads of the age I recommend, would not, under proper care, and with sufficient instruction, make an equal progress. I do not mean to assert that a good seamen would not be preferable, but as the Merchant Service gives higher wages to this class of men than we can (or choose) to offer, we must endeavour to manufacture for ourselves an inferior article, if we cannot afford to pay the full price for the best.

Having thus stated, in as full detail as appears necessary, the improvements I venture to suggest, to those with whom their adoption and execution must rest, I will not detain my readers by any further arguments in support of them. Nobody will, I think, deny that a maritime power, like Great Britain, if she intends to preserve her naval superiority, must be prepared at home as well as abroad ; and that in proportion as affairs become more serious and critical at a distance, and the necessity of reinforcing foreign stations more apparent, of so much more urgent importance is a well organized reserve at home, since no country can be considered as displaying due vigour, foresight, or arrangement, if, when apprehending and preparing against collision abroad, it is deficient in those precautions for the protection of its own coast

and commerce, which at such a moment should be most seriously attended to.

The annexed extract, from the *Journal des Débats*, may not be uninteresting to those who wish for information on the present state of the French Navy, and the progress it has made ; while their remarks on our own, and the accurate accounts they appear to possess respecting it, are not less deserving our attention.

A P P E N D I X.

TRANSLATION FROM THE "JOURNAL DES DEBATS,"
OF THE 21st SEPTEMBER, 1840.

PARIS, *20th September*.—A review specially devoted to the English Navy and Army, and which enjoys in England a character almost official, the "United Service Journal," contains in its last number, a comparative statement of the Navies of France and England. While we admit the exactness of the figures given, and the fidelity of the quotations made by the author of this article, we cannot, however, prevent ourselves from finding fault with a tone of "hauteur" and arrogance in it, which is becoming to no one; pride is an evil counsellor, which often prepares cruel deceptions for its dupes; which leads its victims by ways so deceitful, that even in letting them set out from bases just in appearance—as in the present case, it conducts them to false and inapplicable conclusions, as happens to the author of the article in question.

Doubtless, we do not mean to dispute in any manner the numerical superiority of the English Navy,

both in men, and in vessels (*materiel*.) But, it does not follow from this, that when they have exhibited to us a threatening display of 105 ships of the line, and 86 frigates, in comparison with our 46 ships of the line, and our 56 frigates, we ought immediately to lower our colours, and return to our ports, with the shame and confusion of children, who should be surprised in attempting to ape the attitudes and bearing of grown men. There is now-a-days, almost a blind reliance on figures; they are regarded with too much complaisance as the most authentic elements of certainty; they offer so much facility to the carelessness and incapacity of men's minds, that it is not sufficiently recollected, that figures are themselves the results of intellectual operations in which error may have mingled; and as there is nothing which so absolutely resembles one figure as another figure, we too often allow ourselves to compare together, things which are essentially different, or which, resembling in appearance, are subject to conditions of existence entirely different. This very article of the "United Service Journal," will show us the fallacy of some of those comparisons which are founded on a great display of figures.

Let us speak in the first place of the "*materiel*" considered in itself, and afterwards of the wants which it is called to satisfy in the two countries.

What do the 105 English ships of the line consist of? This total comprehends, even according to the showing of the English writer, of 28 line-of-battle ships, armed, or kept in a condition of being so, more

or less advanced ; 54 ships disarmed, and afloat ; and finally, 28 ships building.

Of the 28 ships of the line "in commission," as the English say, we shall see in the first, seven which are now incapable of warlike service, viz:—the "San Joseph," taken from the Spaniards, in 1797: the "Victory," 104, on board of which Lord Nelson died, at Trafalgar ; (this ship is now 75 years of age ;) the "Ocean," 80, which serves as a depôt at Sheerness ; the "Donegal," 78, recalled to England to be paid off ; the "Excellent," 76, which serves as a school for seamen-gunners, at Portsmouth ; the "Magnificent," 72, turned into a hulk at Jamaica ; the "Poitiers," 72, is the depôt of the port of Chatham.

The 54 ships of the line afloat, are composed of 13 ships, from 100 to 120 guns ; 8 ships of 84 guns, and 33 ships of from 72 to 78 guns. We ought to admit that we possess no sufficient means of ascertaining with any degree of certainty, the actual state of these vessels. But however, it must be said, that in 1815, at the close of the continental war, England had in commission more than 200 ships of the line and frigates of all classes, and that she hastened to pay them off for the most part, when the peace had reduced the work of the Royal Navy to cruizing against slavers, or Malay pirates, watching the coasts, and the carrying of garrisons and despatches over the immense extent of the British empire. It is the remains of these vast armaments of 1815, which now still composes the great mass of the "*materiel*" afloat in the English ports ; the great number of vessels which were pos-

sessed beyond what were required for the wants of the service, and which there were no means of turning to account, was a reason why few have since been built. We shall see a proof of this in the names of these vessels, of which a good number were known in the time of the continental war. Another indication of what we advance, is, that two-thirds of these ships are "seventy-fours," that is to say, vessels of a model and scantling, which are given up now-a-days, when the force of ships in artillery is almost unreasonably augmented. Now, what is in 1840 the effective value of all this floating "*materiel*?" This is, what we confess that we do not know; this is, what no one perhaps can tell exactly; not even the Admiralty; but this is what we may affirm—that these 54 ships of the line afloat, are very far from representing 54 ships ready to be put into commission.

As to the 23 ships of the line building, we have nothing to say of them, unless it be, that they confirm what we have just advanced; for of this number there are only three "74s," and they besides, were perhaps already on the stocks at the peace of 1815.

After having quoted these imposing figures, it seems that we might experience some embarrassment in speaking of the 46 ships of the line which France possesses (23 armed, or afloat, and 23 upon the stocks). It must be said, however, that we do not reckon among them any hulk; for, as soon as any of our vessels become unseaworthy, she is forthwith removed from the lists; it must be said that of our 23 ships afloat, there are 18 completely armed, or about

to become so, and of the five others perhaps one only which requires some repairs. It must be said that in general our ships of the line (we by no means speak of the extent or courage of the seamen by which they are manned) are materially superior to the English ships, in the excellence of their construction, the perfection of their armament, the solidity of their scantling, the number of guns which they mount, and the dimensions of the calibre of their guns.

As to the 23 ships of the line which we have on the stocks, we may say, that their state of advancement, expressed according to the usage by 24ths, represents 17 ships of the line afloat.

Little is proved, therefore, in comparing the 105 English line-of-battle ships with the 46 French ships; still less is proved in comparing purely and simply the number of frigates possessed by the two navies. Of late years France has constructed a good many of those formidable frigates which reckon on their upper decks 30 thirty-pounder carronades or mortar guns, and on their main decks 28 long thirty-pounders, and 2 eighty-pounder mortar guns. A frigate of this force would sustain, without much difficulty, the attack of a 74 gun ship of the old class, which only mounts twenty-four and eighteen-pounder guns; the broadside of the one certainly weighs as much as that of the other, without reckoning that the frigate possesses nautical qualities, and advantages in sailing and manœuvring, which the line-of-battle ship does not. France has 10 of these frigates afloat, and 9 on the stocks, which might almost all be launched. *England has*

not yet built a single one of these frigates. As to the frigates of the 2nd class, that is to say of 50 guns, if the English Navy reckons 18 of them, which are partly old ships of the line “*razéed*,” the French Navy reckons on its side 19, which are almost all new vessels. It is only when we talk of frigates of the 3rd class that England recovers her numerical superiority. But among these frigates, how many are there which, having been paid off in 1815, would now be unfit to send to sea? To what degree would these vessels, which are so convenient for performing the police of the seas—for transporting the great personages and the garrisons which England moves about the ocean, be prepared to enter upon a contest with a great maritime power like France, which has of late years so greatly increased the effective force of its vessels of war?

But without going into further length on this subject, we cannot do better than to quote what we read in the “*Times*,” to-day, and which fully confirms what we advance.

[Here follows a long extract from the “*Times*,” of the 18th of September.]

The French writer then continues:—

But, if the calculation of figures teach us but little respecting the comparative force of the vessels which the two Navies are composed of, they become still more insufficient when we come to consider the wants which they have to provide for in the fleets of the two countries.

England possesses an immense colonial empire, which also requires an immense protection. There is not a sea, nor a part of the world where she is not vulnerable, and consequently where she ought not to be ready to repulse the attacks of an enemy. She must face him on a front of marvellous extent, that is to say, must fix her forces on a host of points. And not only are there islands and countries in which her power must always make itself felt, it is besides a vital condition of her existence to be in every sea ready to protect the going and coming of the merchant vessels which feel her gigantic industry, and which themselves pay in duties or customs almost the half of her budget. There is in that, one of the inconveniences of greatness,—an inconvenience which it is glorious to endure, but which an enemy, like France, would know how to turn to account. France, in fact, which possesses, so to speak—hardly any colonies,—which trades but little by sea, and which draws almost all its budget from her internal resources, would have the advantage at present in a maritime war, of being able to assemble all her ships on the point which would suit her—to choose her own field of battle—and by throwing upon it superior force—perhaps to determine the victory over an enemy who might reckon nevertheless, dispersed over the ocean, more ships of the line and seamen than France.

Behold, moreover, what is at this moment the distribution of the armed vessels of the English Navy on the principal stations which she occupies.

[Here follows an account, apparently drawn from

English official sources, of the amount and distribution of the ships at home and abroad.]

In conclusion, we ought to repeat that we have not intended to contrast in any manner the numerical superiority of the English Navy, as well in men as in material of every kind. We have only sought to shew that comparisons of abstract figures prove but little; and that, thank Heaven! there is no enemy, however powerful, against whom France is not in a condition henceforward to maintain an honourable contest, if unjust aggressions should force her, after ten years of sacrifices to the peace of the world, to repel force by force.



SUGGESTIONS

FOR

THE SPEEDY AND SECURE CONVEYANCE

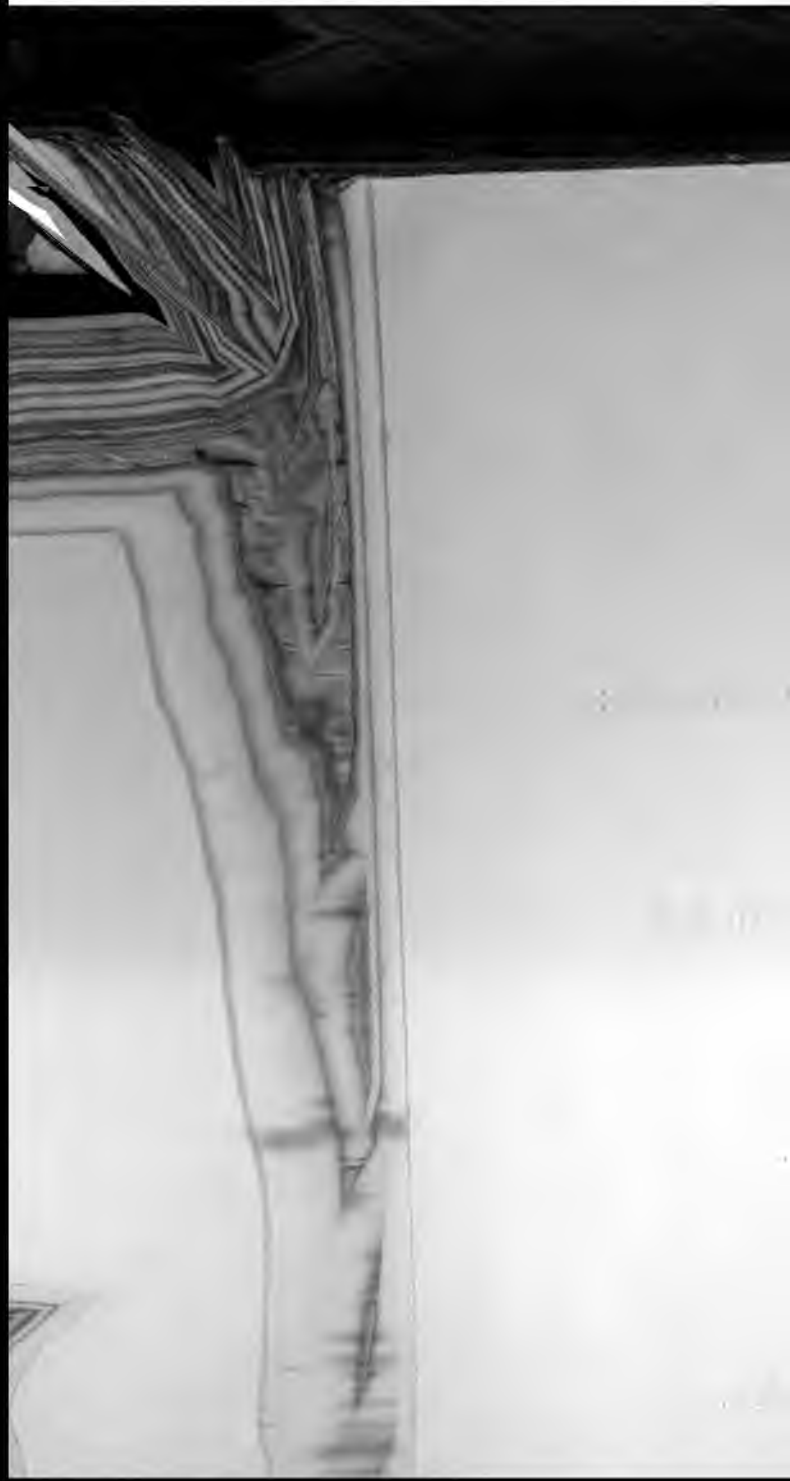
OF OUR

R E I N F O R C E M E N T S

TO

C A N A D A.

BY CAPT. BOWLES, R.N.



London, 27th December, 1837.

It will be seen that the following letter was written to the then First Lord of the Admiralty immediately after the embarkation of the army for Lisbon, in the winter of 1826. The weather fortunately proved favourable, and the squadron made a very short passage to the Tagus, but if it had been delayed in the Bay of Biscay, by the S.W. gales, so frequent at that season of the year, the troops must have suffered severely, as they were much crowded in the men-of-war, the "Wellesley," of seventy-four guns, having 1300 men on board, and the other ships being almost equally full. As this is the only occurrence of the sort since the peace, the attention of the Admiralty does not appear to have been since drawn to this subject, and with the exception of two ships of war (the Jupiter and Athol) fitted for this purpose, the practice of conveying troops to foreign stations in hired merchant vessels, has been persevered in.

At this moment, however, when according to all present appearances, a great effort must be made early in the spring, to send out a large reinforcement to our army in Canada, and when every practicable precaution should be taken to provide for their speedy and secure conveyance, and for their disembarking in a perfect state of discipline and efficiency, I hope I may be permitted, without presumption, to urge the consideration of this most important subject on our naval administration, and I have thought I might do so with more propriety in now publishing a letter, written some years since on a nearly similar occasion; because if the arguments I then urged should not be thought

worthy of attention, I have very little to offer in addition to them.

Those who are acquainted with the coast of North America, and more particularly with the entrance of the St. Lawrence, when the navigation first becomes practicable, will, I am sure, agree with me in thinking that too many precautions cannot be taken to secure our troops against the various risks they must encounter from fogs, floating ice, inclement weather, &c. &c., and that their security, health, and discipline can only be satisfactorily provided for by embarking them in ships of war, carefully fitted and arranged for their conveyance.

I cannot conclude these observations without very earnestly soliciting the attention of the Ordnance Department to the suggestions I have offered with respect to the conveyance of stores belonging to that Department; and as it is by no means impossible that piratical privateers may be found cruising at the mouth of the St. Lawrence next summer, I cannot avoid recalling to their recollection, that at one of the most important periods of the war with the United States, and when the armament of our squadron on the Lakes was of vital consequence to our operations, an Ordnance transport, full of guns and artillery stores, bound to Quebec, having lost its convoy in a fog on the banks of Newfoundland, was captured by an American privateer, and having been carried safely into Boston, enabled the enemy to fit out their squadron with the equipment intended for our own.

W. BOWLES.

TO
THE VISCOUNT MELVILLE,

&c. &c. &c.

London, 16th December, 1826.

MY LORD,

THE permission which your Lordship has occasionally been kind enough to give me, to lay before you suggestions on various subjects connected with the public service, encourages me to take the liberty of offering some observations, which, at the present moment your Lordship may not deem unworthy of consideration, and which, indeed, I have been principally induced to submit in consequence of the recent preparations for the embarkation of troops, which happened to fall under my own observation a few days since at Portsmouth.

It has often been a subject of remark amongst professional men, that complete as our naval preparations are in every other branch of service, and thoroughly provided as we are with every other class of ship which would be required at the commencement of hostilities, yet, that by some oversight, we have been always unprepared with the means of rapidly embarking, and transporting to any distant point, such a body of troops as at the breaking out of a war must always be

urgently required, either for offensive or defensive purposes, without resorting to one of two expedients, both of which are liable to strong objections—namely, the employing our line-of-battle ships on this service, or hiring a large number of merchant ships for transports.

Against the first may be urged the great hazard we might incur in the face of an active and enterprising enemy, by disarming and disorganizing a most important part of our naval force, at the very moment when every effort should be made to increase and perfect its efficiency. None but professional men can have an idea of the total subversion of all previous order and arrangement which inevitably follows the embarking a large number of troops on board a regular ship of the line—the crew are driven from the deck they usually occupy, to damp and exposed berths on the main deck, where they have no sufficient accommodation either for messing or sleeping; the officers are turned out of their cabins, and the troops themselves being obliged either to sleep in hammocks which they in general do not understand, or to lie on the deck, usually prefer the latter, and if the voyage is long and stormy, or the weather cold and wet, much sickness will be the inevitable consequence both amongst the seamen and soldiers, much relaxation of order and discipline will follow, and some months may very probably elapse before the former efficiency of the ship is thoroughly restored.

The second mode of conveying troops in hired merchant ships is equal objectionable—the publicity which

is unavoidable when the ships are contracted for, defeats all hopes of secrecy as to the force or destination of the expedition; and the innumerable evils which have resulted from the ignorance and misconduct of the masters, the bad sailing and imperfect equipment of the ships, added to their total want of force to resist even a common privateer, all combine to render this the most unsafe manner of conveying troops which can be devised.

A great maritime nation should always be prepared with the means of embarking a considerable force rapidly and secretly, and this can only be done by previous system and arrangement, and by providing such a number of ships of war adapted to this particular purpose as may ensure its accomplishment with the least possible delay. I believe that the experience of the last war fully proved that either the smaller class of ships of the line, or frigates fitted as troop-ships, were the most economical, as well as the most efficient classes of ships which could be employed for this service. They will carry with ease from four to six hundred men, to the greatest distance for which they can be required, and of course more for shorter voyages.

They are respectively navigated by an establishment of officers and men little exceeding in number that of a frigate or a sloop of war. They are fast sailers, very sufficiently armed, and their appearance is so warlike, as to deter an enemy, not very superior in force, from approaching them.

Contrast the situation of a battalion embarked on board a ship of this class with that of another crowded

into four or five miserable transports, creeping slowly along, and (if they have the misfortune to lose their convoy) a prey to the first enemy's cruizer they fall in with.

I have been led by a strong feeling of the importance of the subject, to dwell longer than I had intended on these preliminary observations, and I will now briefly state the proposition which I take the liberty of submitting for your Lordship's consideration. It is that a certain proportion of troop ships should in future be considered as an indispensable part of the establishment of His Majesty's navy;—that the whole of these should be perfectly complete, as far as respects their internal fitting, and readiness for service, and that such a proportion of them as would carry five or six thousand men, (about twelve or fourteen) should be kept in commission, with a commander, and a small establishment of officers on board, so that in the event of any sudden emergency requiring secrecy and dispatch, troops might be silently removed to the coast, and embarked on the shortest notice on board ships in all respects perfectly prepared for their accommodation, and ready to proceed instantly, and without convoy, to their destination: from fifteen hundred to two thousand seamen are all which would be required to complete these ships, supposing them to be totally unmanned when the order was given, while our regular naval force need be in no way interfered with or disorganized, but might proceed in its equipment with all possible celerity.

I would only beg leave to add one further sugges-

tion. During the late war, ships of war fitted for the purpose were very frequently employed for the conveyance of infantry, but cavalry and artillery continued to be transported as formerly, in hired merchant ships, and the delays and misfortunes which resulted were frequent, and highly injurious to our operations. There can be no difficulty whatever in fitting a proper number of our smaller and half-worn-out frigates for these purposes, and then any expedition which sails will be a complete army, fully equipped for immediate service, and divested of every incumbrance which might impede or retard it.

Those officers who remember the delays and disasters of Admiral Christian's ill-fated expeditions will, I am sure, agree with me in asserting, that the misfortunes which befell it could not have occurred to an army embarked on board ships of the description I propose, and I confidently appeal to those who were present at the landing in Egypt to decide whether that brilliant and remarkable operation was not most materially facilitated by the number of ships of war fitted for the conveyance of troops, which accompanied the fleet on that occasion.

If at some future period we commence hostilities, without any previous preparation of this sort, it is easy to foresee the confusion, disappointment, and enormous increase of expense which would immediately ensue.

The reduced state of all our establishments leaves our foreign garrisons on the lowest possible scale, and immediate reinforcements to all our colonies would become matter of the most urgent necessity. Contracts

for transports of every description must then be hastily entered into, on such terms as the owners might think fit to impose, and with but little time to examine into the condition and equipment of the vessels so engaged. At such a moment, every advantage would be taken by those interested, of the necessities of Government; and the imperfections and inefficiency of many of the vessels would only be discovered when it was too late to remedy them.

Two other most serious objections present themselves immediately to the mind of any one who will seriously consider this subject.

The first is the competition for seamen which would inevitably be excited between the transport service and the Royal navy, (the former giving much higher wages and offering many superior inducements,) at a moment when every exertion would necessarily be making to prepare a large fleet for sea.

The second, that a very great proportion of the vessels hired would be fitted out in the Thames or in the eastern ports to which they belonged, and that in addition to the delays inseparable from their preparations for this new service, they must be convoyed separately round to the western ports, from which the embarkation of troops would in all probability take place.

It would defy all calculation to predict when a large number of merchant vessels under these circumstances could be assembled at Plymouth or Cork, especially during the winter half-year, while with our regular troop ships no delay whatever need take place,—each

might proceed separately (and secretly if it was wished) to the appointed destination; and it is, perhaps, not too much to say, that the ships conveying reinforcements in this manner to the West Indies, Mediterranean, or North America, might have performed the service they were dispatched on and returned to England, before an unwieldy convoy of hired transports, fitted out under the circumstances I have described, would have cleared the Channel.

To bring this system to perfection, it will only be necessary, instead of too rapidly breaking up or selling ships which may from age become unequal to the weight of their heavy masts and guns, to give them such a repair as may render them equal to this lighter species of service, and completing all their internal fittings, preserve them in equal readiness with the rest of our navy for immediate service, employing such as it may be deemed advisable to keep in commission on those various services for which a very considerable expense in the hire of transports is now continually incurred.

I have the honour to be,

MY LORD,

Your Lordship's

Most obedient servant,

W. BOWLES.

A

SECOND LETTER

ON THE

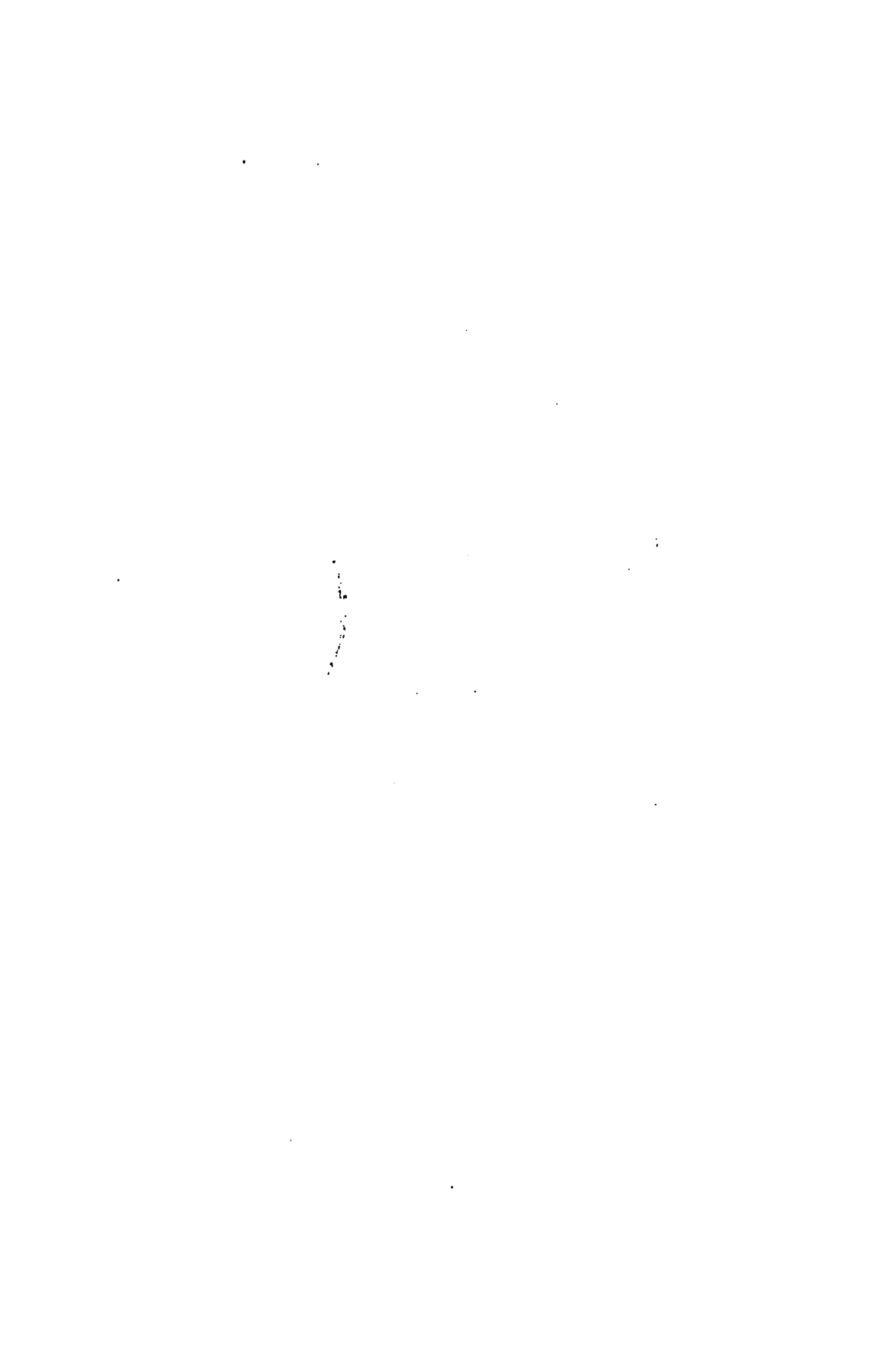
CONVEYANCE OF TROOPS

TO

CANADA.

By CAPT. BOWLES, R.N.

L



TO

CAPTAIN SIR W. SYMONDS, R.N.

&c. &c. &c.

London, 21st April, 1838.

MY DEAR SIR,

YOU are aware that some months since I published a few suggestions on the speedy and secure conveyance of our reinforcements to Canada ; and as the arrangements are now nearly completed, it will be neither uninteresting nor uninformative to take a short review of all that has occurred since the receipt of the first intelligence of the insurrection in those Provinces. But before I commence my observations, I am anxious to declare distinctly that it is not my intention to impute the slightest blame to any department or individual, but merely to call the attention of our naval administration to a part of our system which has long been defective ; to which may be attributed many of the difficulties and disasters which have befallen us at the commencement of former wars, and which those who first take measures to guard against in future will justly entitle themselves to the thanks of their country.

I need hardly remind you that my proposition is, to consider a certain number of troop-ships an indis-

pensable part of the establishment of Her Majesty's navy; that the whole of these ships should be kept perfectly complete, as far as respects their internal fitting and readiness for service; and that such as it may be deemed advisable to keep in commission, should be employed on those various services for which a very considerable expense in the hire of transports is now continually incurred; and I endeavoured to point out the strong objections which exist against employing either ships regularly fitted for war or merchant vessels on this service.

The first intelligence of the revolt in Lower Canada reached London the latter end of December, and nothing could appear more urgent than the necessity of instantly dispatching reinforcements to Halifax and New Brunswick, from whence the whole garrisons had been marched to join Sir J. Colborne.

According to all appearances at the moment, expedition was of vital importance, and the troops were ready for embarkation at Cork; but what were our means of conveyance? Our *two* troop-ships, the Jupiter and Athol, were somewhere abroad;—and such is the reduced state of our naval establishment, that we had actually only one ship of war in England—the *Inconstant*, of 36 guns—manned and ready for sea.

After some little delay in fitting her for the conveyance of troops at that inclement season of the year, and in weather so unusually severe, she sailed with 260 of the 93rd Regiment, and 40 women and children, on the 7th January, for Halifax.

The *Pique*, a frigate of the same class as the

Inconstant, was ordered home from the north coast of Spain to take the remainder of the 93rd, and she sailed from Cork on the 23rd January, with 336 officers and men.

The Hercules, of 74 guns, was at the same time recalled from Lisbon for this service ; but arriving at Plymouth with her mainmast sprung, and requiring some further refitment, she did not leave Cork for Halifax until the 27th February ; she carried 436 officers and men, belonging to different regiments ; and the Vestal, of 26 guns, sailed on the 3rd March with 160, being the remainder, which the Hercules could not accommodate.

It will thus be seen, that from our want of preparation for any sudden emergency of this description, (an event which, from the vast extent of our foreign possessions, ought never to be considered improbable, or unnecessary to provide against,) nearly two months elapsed before even two regiments could be dispatched to Halifax, although I believe no exertion was spared, or time lost, in preparing our only disposable ships for this service.

I have remarked in my former letter on the strong objections which exist against employing our regular ships of war on a service of this description, for the reasons there stated—namely, the imperfect accommodation they afford, and the serious risk we should incur, in the event of impending or commencing hostilities, by disarming and disorganizing a part of our force, which ought at such a moment to be kept in the most perfect state of order and efficiency ; and I

will now proceed to show the arrangements which became indispensable in the four ships in question.

In the *Hercules*, of 74 guns, all except two on the fore-castle were dismantled; those belonging to the lower deck left at Devonport, and the remainder lashed amidships on the lower deck. The ship's company were removed from their usual quarters to the main deck, and the main deck ports caulked in. The ship, therefore, was completely disarmed, and incapable of the slightest defence.

In the *Pique* the whole of the troops were berthed on the main deck, the guns being housed, and the ports caulked in; the crew remaining in their usual berths on the lower deck. The ship may therefore also be considered entirely disabled for fighting.

The *Inconstant* kept her main deck clear; the soldiers had one side of the lower deck, and the ship's company the other; they were much crowded, and one-half both of the soldiers and seamen were obliged to bring their hammocks up with them when they came on deck, to make room for the remainder.

The women and children slept under the half-deck and fore-castle, on gratings without bedding, and only such covering as they could provide themselves with, no provision of any sort having been allowed for them.

The *Inconstant* had a very good passage of twenty-three days, but fourteen of the 93rd landed sick on her arrival at Halifax, and one woman died in childbed.

The *Vestal* was fitted in all respects like the *Pique*.

I think these statements completely prove the assertions to which I have referred, and I shall therefore

only remark farther on this part of the subject, that if the disposition of the American Government had been uncertain or menacing, even this small reinforcement could not have been dispatched in this manner without very considerable risk; and yet we had no other means at our disposal.

But if a certain number of troop-ships was always kept either in commission or in readiness for fitting out, it is obvious all these dangers and inconveniences would be entirely obviated.

Those which were kept in commission would naturally be almost constantly employed in the conveyance of reliefs to our numerous colonies, and might, I should think, assist very materially in furthering an object which it is generally understood the Government have in view,—the more frequent exchange of regiments stationed in unhealthy climates: carrying at the same time to our foreign dockyards and depôts all Government stores of every description, naval, ordnance and victualing, for which so large an expense in the hire of transports is now continually incurred.

If this system was adopted, a considerable proportion of these ships would be always within reach, either fitting for or returning from their various voyages; and consequently, supposing that six of our smallest 74's and six or eight 46-gun frigates were appropriated for this service, a proportion of the frigates would probably be kept in commission during peace, and the larger ships divided between the three great arsenals (or at Portsmouth and Plymouth, as might be thought most convenient,) for the purpose of rapid equipment

and manning : and with this arrangement once complete, no emergency could find us in our late unprepared state. A fortnight ought to be sufficient for fitting out and dispatching all these ships, which would require no convoy or protection, but, on the contrary, if it was found advisable to unite them (at all events as far as their courses laid together,) might form a very respectable squadron fully armed for all purposes of defence.

As the expense of the proposed force will perhaps be urged as an objection against it, I wish to explain, that in my opinion, no increase whatever need be incurred beyond the internal fittings, which must be very inconsiderable.

I should propose, that the two-decked ships, when in commission, be placed on the the smallest class of fifth rate as to officers and men (250), and carrying about 32 guns, their proper lower masts, frigate's topmasts, &c.

The frigates on the establishment of a sloop of war (120), carrying 18 guns on the quarter-deck and fore-castle, and fitted with a poop, for the purpose of increased accommodation for officers, with their proper lower masts, and 28-gun ship's topmasts, &c.

To keep six frigate troop-ships in commission during peace, it would therefore only be necessary to diminish our establishment by the same number of sloops of war, and on some foreign stations, particularly in the East and West Indies, where sudden emergencies requiring the embarkation and concentration of troops may be expected to occur, it would extremely facilitate

the arrangements of the officers commanding the forces, to know that they had within their reach such ample means for transporting a considerable body of men at a very short notice, and the public service would therefore be very much benefited by such a change in the classes of the ships composing the squadron on these stations.

An extension of this system might also obviate the necessity for a dangerous practice, which appears to be gaining ground, of sending our ships of war to foreign stations, with a reduced establishment of guns and men, and which in the event of any sudden collision with an antagonist, in all respects as perfectly prepared for hostilities as all French, Americans and Russians are well known to be, might most seriously endanger the national honour.

The flag-ships in the East and West Indies, and at the Cape and African Stations, are now equipped in this manner, without lower-deck guns, and with a crew little exceeding in strength that of a frigate, but standing nevertheless on our own official navy list as 74-gun ships, and they would undoubtedly be so represented in the event of capture or disaster.

The object in this case is, I presume, to obtain additional accommodation without increase of expense, by employing a two-decked ship, reduced to the establishment of a frigate; but it appears to me, that if my suggestion should be thought worthy of adoption, these advantages may be secured at a much smaller cost, and the risks I have adverted to be entirely avoided. The accommodation of a two-decked ship is

only required for the purpose of carrying out the Admiral's family comfortably to the station where they are to reside on shore, during the period of his command; and when they are once landed, a half-armed, and half-manned ship, is very little calculated to set an example of activity and good order to the squadron, to which it would be rather an incumbrance than an advantage. I would, therefore, propose, that on occasions of this description, a two-decked troop-ship should be provided for the conveyance of an Admiral wishing it, which after having performed this service, might proceed on other duty, or bring home the officer superseded, as circumstances might require.

The establishment of a ship of this class, would be only 250 officers and men, whereas those which I have described carry 430, so that they are much more expensive than frigates, although scarcely equal to them in force, and very inferior in sailing.

Were I to relate at length the delays, the dangers, the sufferings, and the actual loss of life, which has arisen from the employment of hired merchant ships for the conveyance of troops, I should, I am aware, very materially strengthen this part of my case, and produce a much more powerful effect on the public mind; but my object is not to excite popular clamour, but to solicit the calm and serious attention of those who have it in their power to correct these evils, to the observations I have offered; and I will therefore only mention one fact, which is of such recent occurrence, and had so nearly been accompanied by such a

lamentable catastrophe, that I cannot avoid alluding to it.

The *Barossa*, a hired transport, arrived in the Shannon last January, with the head-quarters of the 78th Regiment on board. She had been *five months* on her passage from Ceylon, and at the time of her fortunate arrival in Ireland, had only four days' provisions left !

I apprehend nobody will deny that a frigate troopship would have made this passage in about two-thirds of the time ; and this unlucky regiment, which, after passing many years in a hot climate, was thus brought home during the utmost severity of winter (narrowly escaping starvation,) would have arrived in November, and avoided all the hardships to which it was exposed, and which occasioned the loss of many valuable lives.

Surely, when we consider the many and severe privations which the irksome and hazardous duty of garrisoning our foreign possessions imposes on our troops, their long banishments from their country, and the unhealthy climates in which they are obliged to serve, it is incumbent on us to alleviate these inevitable hardships, by providing for their safety, as well as comfort, during the long and expensive voyages which their duty obliges them to undertake. The ships in which they are conveyed, should be in fact as much a floating barrack as possible, with sufficient and convenient accommodation for both officers and men, and complete arrangements for the preservation of discipline and health.

If these suggestions should be thought deserving of any attention by those to whom they are addressed, I will only further add, that there was never perhaps a moment in the history of the British navy, when they might so easily and cheaply be carried into effect. We have a considerable number of ships of the line, as well as frigates, very inferior in point of actual force (although nominally of the same class) to those of other nations, to which we may expect to be opposed in war. Most of these ships are now about half-worn, and soon will require expensive repairs in their upper works, although their bottoms are in general, I believe, tolerably sound. It is certainly not desirable to lay out large sums of money in perpetuating the inferiority of our navy, but all these ships will make excellent troop-ships, with a very slight repair, and last many years with the light masts and yards, and reduced armament, which I have recommended; and on an emergency, such as the arrival of a superior squadron on a foreign station, or any similar occurrence, they might have additional guns put on board, and at all events, materially add to our apparent force, and intimidate an enemy.

The employment of a considerable number of our officers, in a service requiring much seamanship and activity, is not the least among the advantages to which I look forward from the adoption of this measure, but its complete success can only be secured by the strict enforcement of all the regulations for the preservation of discipline and good order, which govern Her Majesty's navy, and by a careful selection of the officers

appointed to command these ships. I am old enough to remember the partial failure of the experiment at its first trial, from an impression getting abroad that the command of a troop-ship was considered at the Admiralty a sort of condemned service, from which no man could rise in his profession; but subsequently, when after two or three years it ensured promotion to a commander, or a frigate to a captain, whose conduct had been in all respects satisfactory, no part of our navy was in a more creditable state of discipline and efficiency—and I cannot recollect a single ship of this class either lost or taken.

Having now briefly stated all the principal arguments which occur to me in support of my proposition, I will conclude this letter with a short recapitulation of those which appear of most importance in the consideration of the subject.

I hope I have proved that the conveyance of troops in ships fitted for war is objectionable in almost every point of view.

That the accommodation afforded is imperfect, and injurious to health—(the Hercules had near 200 men sick on her passage to Halifax);—that it is obtained at the sacrifice of all comfort to both officers and seamen, and consequently gives rise to much dissatisfaction and bad feeling between the two services; and that the discipline and efficiency of the ship, as a man of war, is totally sacrificed; but a still stronger argument remains, namely, that in the event of any serious apprehension of hostilities, no government would venture to disarm and send to distant stations a

force which would be urgently required for the defence of our coasts and commerce; and the reinforcements to our colonies would thus be delayed for perhaps months, at a crisis of so much importance to their safety.

By employing the ships and officers of the Royal navy in the conveyance of troops and public stores of every description, and by rendering one great department solely responsible for the due performance of this service, all the mismanagement, delays, and misfortunes, which were so common and injurious to the public interests during former wars, would, it may be confidently hoped, no longer occur: under a Board of Admiralty, conducted by naval officers, we should never hear of our cavalry, artillery, ordnance, stores, clothing, &c. &c.—all articles of such immense value as well as vital importance to the operations of an army, being embarked in unarmed and heavy-sailing merchant ships. I have in a former letter alluded to the capture of an ordnance transport bound to Quebec with the whole armament of the St. Lawrence, a new three-decker at that time building, and on which our superiority on the Lakes depended; and I could relate numberless disasters of the same description.

In the tenth volume of the Duke of Wellington's Despatches, frequent mention is made of the capture of transports loaded with reinforcements and supplies for the army by the enemy's privateers; and on one occasion he exclaims, "If they have taken all our shoes" (which were probably coming out by the same insecure

mode of conveyance); "the army must halt for six weeks."*

These were the consequences of a divided responsibility, and of allowing departments to act independently of each other, and to provide their own means of naval conveyance.

It may be hoped that the consolidations which have already taken place, and which have invested the Admiralty with so much more direct power and authority, will go far towards putting an end to a system so vicious, and in every point of view, pecuniary as well as political, so injurious to the interests of the country; and if my suggestions should be thought worthy of attention and trial, I think that the safety, comfort, and rapidity with which our troops will be conveyed to and from their foreign service, and the good effects which will arise both with respect to their health and regularity, by embarking them in fast-sailing roomy ships fitted for their reception, commanded by officers of the navy, and in good order and discipline, will soon be universally felt and appreciated; nor can any Government be insensible to the advantages of having always at command the means of silently and secretly (if necessary) dispatching reinforcements, as well as ordnance and military stores, to any points which pending disputes or negociations might render it very advisable to strengthen, without exciting alarm or

* See also Sir John Barrow's account of the relief of Gibraltar by Lord Howe, and how nearly the whole operation failed, from the ignorance or misconduct of the masters of the transports, which accompanied the fleet on this service.

public observation, and at the same time without weakening our naval force at home, which at such a moment, it would be so important to keep in a perfect state of readiness and efficiency.

The voluntary entry of seamen for the Royal navy, would be much encouraged, and the sufferings and hardships of impressment most materially alleviated, by the employment of spacious and comfortable ships of this description, to receive men at the outports, instead of the wretched and miserable tenders which it has hitherto been our practice to send on this service, whose appearance was sufficient to disgust good seamen, and in which impressed men were crowded as in a jail, and subjected to most unnecessary severity and confinement, occasioning well-founded discontent, and frequently also contagious disorders, which spread through our newly fitted-out ships, at a moment when their efficiency was of the greatest importance.* A frigate fitted and manned as I propose, would be scarcely more expensive than the vessel of this description which she would replace, and be free from all the objections I have enumerated.

I am aware that this is a question on which some difference of opinion exists; but I have never known any important improvement introduced into the navy, without much previous opposition and discussion. When Mr. Pering, the ingenious Clerk of the Checque,

* See Trotter's *Medicina Nautica* on this subject. Almost all the serious illness amongst the ships of Lord Howe's fleet, in the early part of the war of 1793, is traced by him to the crowded and filthy state of the vessels in which the men had been confined.

at Plymouth, first proposed the roofing-over our docks, and building slips, his suggestions were treated with very little attention by the Navy Board, to whom he addressed them ; but in a very short time after they were published, the measure was adopted by universal consent, the only wonder being that so obvious a precaution could have been so long neglected.

To avoid, however, the appearance of entering into anything like argument or controversy on this occasion, I shall merely print a few copies of these remarks for private distribution amongst my friends, feeling confident that if they are worth anything, truth will work its own way.

I am,

My dear Sir,

Yours very faithfully,

WM. BOWLES.

THOUGHTS
ON
NATIONAL DEFENCE.

BY
VICE-ADMIRAL BOWLES.

THIRD EDITION.
CORRECTED AND ENLARGED.

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- I. Duke of Wellington's Letter.
- II. Letter to Lord Haddington, 1844.
- III. Suggestions for Squadron of Exercise, 1844.
- IV. Suggestions for a Reserve Force, 1844.
- V. That a Frigate and Steamer should be attached to the Excellent.
- VI. Two Letters to Lords Melville and Auckland on the Coast Guard.
- VII. On the revision and reorganization of our Establishments for raising Seamen.
- VIII. On the Promotion of Mates.
 - IX. On the Dress and Equipment of the Royal Marines.
 - X. Remarks on Building, Repairing and Altering Ships.
- XI. Speech on Navy Estimates, 1848.
- XII. Speech on Navy Estimates, 1851.
- XIII. Letter to Admiral Dundas on Steam Guard Ships, 1847.
- XIV. Lisbon Squadron.

PREFACE TO THE THIRD EDITION.

London, March 22nd, 1852.

ANOTHER Edition of these "Thoughts on National Defence" being already called for, I cannot but express how gratified, as well as grateful, I feel at the approbation and favour with which they have been received; and in sending them forth to the further notice of my countrymen, I will only very briefly solicit their attention to those later occurrences on which it is important that they should be correctly informed.

The Government resigned on the 23rd February, but as the estimates of the ensuing year had been previously laid on the table of the House, their intentions with respect to the defences of the country were clearly declared, and it became apparent that beyond the smallest possible "*modicum*" of increase to the army, and a scheme which nobody believes will produce a single man, but which comes forth with the high sounding title of a "Naval Reserve," our establishments were to have been continued on the same insufficient and unsatisfactory footing as hitherto.

When Lord John Russell quitted office we had not a single ship of force manned and ready for sea in any of our Ports. Our military means were equally scanty, and if we had been called upon by Belgium (which at

one moment appeared not improbable) for that assistance which treaties entitle her to claim, we must have been reduced to the humiliating necessity of confessing in the eyes of all Europe that we were unable to fulfil our engagements!

This is a state of things altogether unprecedented in English history.

Surely a great nation whose patriotism, constancy, courage, and union, were not half a century ago the admiration of surrounding countries, and of whom it was truly said that "England saved herself by her firmness, and Europe by her example," cannot have so suddenly degenerated.

We have since that period almost doubled our wealth, as well as our population. Our financial condition has been so wonderfully improved and alleviated that we are now beyond all doubt the most lightly taxed nation in the world, and is it possible that we can endure for a moment to exist by sufferance, and grudge the small sum of money which would at once place us in a firm and unassailable position?

The decline and fall of other great nations has usually been preceded by a period of excessive opulence, luxury, and self-indulgence. It becomes us to beware that the utilitarian principles, now so prevalent, and which in fact mean nothing better than intense selfishness, are not gradually undermining our own strength and former greatness.

The new Government has been compelled by circumstances to adopt the estimates of their predecessors in office, and its ability to add or to improve them

must of course depend on the degree of support and encouragement it receives.

I would, in conclusion, request my readers to understand that the recall of the Lisbon squadron only adds one ship of the line and two frigates to a force previously *Nil*, and that at least 5000 men are still required to man and render effective our Home Fleet, which is in all other respects perfectly ready for sea.

W. B.

PREFACE TO SECOND EDITION.

PERHAPS some of those who may peruse these Remarks will recollect that in January, 1848, a considerable alarm had been excited in this country amongst persons who had the best opportunities of obtaining correct information, by observing the evidently increasing disposition of King Louis Philippe's government towards ambitious and aggressive measures, and that having been foiled in 1840 in his designs on Egypt, and subsequently opposed by this country in his attempt to re-establish the "*Family Compact*" in Spain, he was straining every nerve, and taxing the resources of France to the uttermost, by preparations on the grandest and most extended scale for great naval operations. These preparations had more especially in view the formation and equipment of a superior steam navy. No expense was regarded where this object was concerned. All the great arsenals of France were enlarged and furnished with buildings and accommodation of every description adapted for this purpose, and all these important arrangements had been completed and were in actual operation while we were slowly and reluctantly proceeding with similar operations at Portsmouth and Devonport, and grumbling at every shilling expended on works without which it ought nevertheless to have

been obvious to every thinking man that no steam navy could be either useful or efficient. This alarm and uneasiness increased as it became evident that all the defensive and precautionary measures taken by Sir R. Peel in 1845 and 1846 were gradually disregarded or neglected. A squadron of eight ships of the line fully manned and equipped, and intended by him for home service and the defence of our coasts and commerce against any sudden danger resembling that which we had so providentially escaped from in 1844, was either reducing or dispersing on foreign stations; his arrangements for re-organizing our militia in 1846 were abandoned; and in short, without going into further particulars, it became but too evident that his successors had no intention of carrying out his plans, and that the country by successive reductions of both army and navy was again rapidly relapsing into the same defenceless state from which he had been endeavouring to extricate it during the last two years of his administration.

These circumstances naturally gave rise to considerable anxiety and apprehension; various letters and publications appeared, and it became known about the same time that there was in existence a communication from the Duke of Wellington to Sir J. Burgoyne, the Inspector-General of Fortifications, expressing an opinion of our danger in quite as strong terms as any used by less able and experienced persons.*

This letter had not however been made public when the little pamphlet, of which a second edition is now

* See Appendix, No. I.

This is a point of the greatest importance, because we have scarcely an officer now fit for service who has ever commanded a squadron at sea, and the whole of our rising generation are (without any fault of their own) perfectly inexperienced in the manœuvres of a fleet. This is a most dangerous state of things. I recollect that in 1831 when a squadron of exercise was assembled at Spithead, after an interval of *thirteen years*, one ship got on shore, two ran foul of each other, and two disabled their capstans by heaving too heavy a strain on them, the day we proceeded to sea; and all these accidents occurred in fine weather, and for want of practice and precaution. Will any man venture to say, that similar ones may not happen at some much more critical moment, if we persevere in our present system of inattention and negligence?

Three out of the four ships of the line ordered in 1846 to be fitted with screws for home service are at last completed, but I believe that not one of the four frigates is as yet reported ready for sea.

This great delay has arisen (like many other evils) from the too political character of our naval administration. The Government changed soon after the measure was determined on. The new Board of Admiralty naturally thought every thing their predecessors had done must be wrong; some of the engines ordered for this purpose were diverted to other uses, and it was not until after a very urgent remonstrance (of which a copy will be found in the Appendix*) and the loss of

* No XIII.

a whole year, that these preparations were slowly recommenced.

When Sir R. Peel came into office in 1841 our whole Steam Navy consisted of one frigate (the *Penelope*) and twenty-nine sloops. When he quitted it in 1846 he left four ships of the line, twenty frigates, and forty-five sloops, and it was to the careful preservation of this important part of our naval force, and avoiding as far as possible employing it on services which might be performed by more ordinary means, that I directed my remarks. I cannot however say that they produced any effect. Many of the largest and most expensive have been used for the commonest purposes, and there has been so great a want of arrangement with respect to the remainder, and so imperfect has been the supervision hitherto exercised over them, that there is much reason to fear if they were suddenly called for, many defects would be found amongst them which ought not to exist.

With respect to Military arrangements we have done worse than nothing. We have continued to suspend all preparatory measures relating to the Militia, which, however urgent the necessity, could not be assembled in less than five or six months. We have reduced our regular army 10,000 men since 1848, and almost the whole of our best light regiments have been sent to the Cape of Good Hope, to suppress an insurrection encouraged by our own mismanagement and parsimony.

Surely when the Revolution in France burst suddenly upon us in February, 1848, every statesman should

have foreseen that during some of the phases through which it was inevitably destined to pass, events must necessarily occur endangering our own safety and tranquillity. We now know that if the loyalty and spirit of the country, and the glorious manner in which on the 10th April, 1848, it rallied round the Throne, had not extinguished the rising hopes of a disaffected and dangerous party, an army of French *sympathizers* might not improbably have volunteered their assistance. While the Greek question was under discussion, the hostile temper of the Republic was but too evident, and at the present moment the Prince President, however personally well disposed towards us, may at some critical moment be compelled by those who surround and support him to adopt a different course of policy.

It is against this contingency, therefore, that I would so strongly urge my countrymen to guard, and they may be assured that no other measures will so certainly ward off the danger as the adoption of such reasonable and obvious defensive precautions as those which I will endeavour to lay before them as briefly and clearly as possible.

The immediate re-equipment of our Home squadron, and a more perfect and complete arrangement of the whole of the Steam Navy should naturally be our first step, and an increase of 5000 seamen is indispensable for this purpose. The country does not understand how slowly and with how much difficulty so large a number of volunteers is obtained. Our mercantile marine is so immense, and such a large proportion of it is constantly abroad or in motion, that no consider-

able body of seamen is ever found unemployed, and as no bounty is given, or any particular inducement held out, it generally requires about six months to man that number of ships of the line, and this is a strong proof both of the danger of leaving ourselves without any reserve of seamen at home, and also of the impolicy of our present mode of discharging our men after such short periods of service, and at the very moment when their training and discipline has attained its greatest perfection.

In my opinion we should do wisely to revise all our regulations both with respect to the entry and the pensions of our seamen; to assimilate them more nearly to those by which the army is governed; by this means securing their services for longer periods at an age when they are most useful, and also gradually forming a body of pensioners who would be most valuable on any emergency.

On a former occasion when writing on this subject, I suggested the revision of all our existing establishments, with a view to such arrangements as might best secure their co-operation on any appearance of danger.

The Dockyard Brigades have since been formed and organized, but two important bodies of men still remain, who might, if judiciously arranged, be found extremely useful in their respective localities.

I allude to the Coast Guard and the County Constabulary.

With respect to the first it will be seen by a reference to the Appendix (No. VI.) that many years ago I

transmitted to the First Lord of the Admiralty a detailed plan, pointing out the manner in which their services would be found most available, without abandoning the protection of the revenue, or breaking up that system of maritime police which would be equally desirable in war as during peace; to prevent traitorous intercourse, the escape of prisoners, and for many other purposes which will readily occur to my readers, and which I will not fatigue them by enumerating.

I cannot too strongly deprecate the adoption of any of those crude and ill-considered schemes by which I have seen it proposed to disgust and destroy this most important force for the purpose of manning five or six ships.

We might with equal propriety make arrangements for sending the Metropolitan Police to garrison Portsmouth.

With respect to our County Constabulary, which still remains a very imperfect imitation of the same corps in Ireland, it is obvious that it should be placed as nearly as circumstances will admit on precisely the same footing, and under one central authority. It would then become for all Imperial purposes a National instead of a mere Local establishment, and being distributed with a greater view to general protection and security, and augmented or diminished in particular districts as the necessity of the case might require, would form, like that in the sister kingdom, a most valuable addition to our means of defence.

The country may be assured that if the measures of precaution which I have thus suggested, are speedily

adopted ; if a respectable Channel squadron be kept well manned and frequently exercised, our Steam Navy duly arranged and organized in such a manner as to be instantly available, and our coast watched and guarded according to the plan which I have sketched out, our naval preparations may be considered complete as far as any sudden or unforeseen attack is concerned. It ought, however, to be seriously considered that while our army is so weak, our fleet should be proportionally stronger, and a larger reserve of seamen distributed between Portsmouth, Devonport and Sheerness.

With respect to our Lisbon squadron, which has led to our becoming so completely defenceless at home, I confess I am unable to comprehend the policy which induces us to lavish such large sums of money on an object so apparently unimportant. During the last two years we have kept from 2000 to 3000 men in the Tagus, and although the apparent intention in assembling so large a force was the trial of some new frigates built by different constructors, yet in a short time, and before any of the experiments had been fairly and completely concluded, two out of the four frigates were sent away on other service, and have never since rejoined, while the remainder of the squadron have remained (I presume in obedience to their instructions) almost constantly at anchor, and I am afraid that a Return of which I gave notice to the Admiralty, during the last session of Parliament, and which is now ordered, will shew how small a proportion of time has been allotted to instruction and exercise at sea.*

* See Appendix, No. XIV.

I was assured by those best qualified to afford me correct information, that no political reasons existed for maintaining so large a force in the Tagus, and it certainly appears to me that its recall and consolidation with our Channel squadron will at the same time increase our strength at home and diminish our expenses.

I have already alluded in a former part of this preface to the backward state of our preparations at Portsmouth and Devonport for the repair and refitment of our Steam Navy. Sir R. Peel was fully sensible of the importance of this subject, and left in full progress the two basins intended to be surrounded by the necessary buildings at both places; but these great, although indispensable works, have been so slowly and (apparently) reluctantly proceeded with, that, unless a change of system is adopted, and greater energy manifested, we are in very great danger of finding ourselves far behind our neighbours in the means we possess of speedily repairing and refitting disabled steamers.* Few people appear to be aware of the magnitude and completeness of all these arrangements in the French dockyards, or of the advantages which will arise from them on any emergency.

I have thus endeavoured to represent in calm and practical language the means by which, without any alarm or ridiculous panic, we may speedily and cheaply place ourselves in such a firm and dignified attitude of defence as at once to discourage hostility, and restore confidence at home. It is useless to look backwards on the various events which have contributed to place

* See Speech on Navy Estimates, Appendix No. XII.

us in a situation so little creditable, and so unlike our former national character. All parties are, perhaps, (however unconsciously) more or less to blame on this occasion. We have suffered minor considerations to engross too much of our time and attention, and have derided as alarmists all those who have attempted to awaken public attention to the defenceless state of the country.

Her Majesty's Ministers appear, however, to be at last aroused to a sense of our danger, and their own responsibility ; and however disposed I may be to question the policy or good intentions of those who prefer commencing the Session of Parliament by throwing down the apple of domestic discord, instead of introducing at once the measures so urgently necessary for our national security,* I venture very earnestly to entreat that once powerful party with which it was some years since my pride and pleasure to act, and whose dissensions and severance are so deeply to be lamented, not to support any proposition which may have for its tendency, or involve in its results, any reduction of the national income, or embarrassment to our finances at this critical period.

The whole blame of obstructing our defensive arrangements would in this case be infallibly thrown upon them, and an excuse afforded for again postponing or diminishing those precautions which have already been too long delayed.

* Lord J. Russell at that time (1852), as well as now, insisted on his Reform Bill taking precedence of all measures for the defence of the country.

Several papers will be found in the Appendix having reference to suggested Naval improvements, and not strictly connected with the subject now before the public, but they may be read with some interest by professional men, and this is perhaps the last opportunity I may have of thus making them generally known.

W. B.

Feb. 9th, 1852.

THOUGHTS

ON

NATIONAL DEFENCE.

It is unnecessary to dwell on the change of circumstances which has rendered the early consideration of this subject so vitally important. We have a rival power within a few hours' sail from our shores, keeping up a well disciplined and organized army of 450,000 men, and possessing all the means by which a large proportion of this force may be rapidly concentrated, embarked in steamers assembled with equal certainty and celerity, and directed against one or more of those many vulnerable points which offer such strong temptations to an invading enemy, in a very few days after the breaking out of hostilities. These facts will not be disputed, and the question therefore naturally arises, to what extent have we matured defensive preparations calculated to meet this obvious danger? Are our dockyards and arsenals secured against any sudden attack? Are Jersey and Guernsey safe? Have we in England a sufficient regular force to meet at once in the field a body of 20 or 30,000 well disciplined troops, the smallest number with which an invasion would be attempted?

What answers can be offered to these simple but most serious queries? We can only confess with shame, that until the last three years, these considerations, vitally important as they are, were annually disregarded and postponed by successive administrations and Parliaments; and it was not until the danger of a sudden rupture with France on the Tahiti question in 1844, had at last awakened us from our dreams of delusive security, that we, for the first time, opened our eyes to the peril from which we had so providentially escaped.

It soon became perfectly well known that the French Government had contemplated a sudden attack on Portsmouth and Plymouth, with a force assembled at Cherbourg, and consisting chiefly of steamers, of which they could have collected towards forty of all classes, capable of conveying troops for so short a distance; while our whole naval force, then within reach, consisted of three heavy sailing three-deckers, fitted out for summer exercise, and we had not, at that moment, a single frigate or smaller vessel, and scarcely a steamer of force in any of our home ports ready for sea. Our land defences had been equally neglected. Very few guns were mounted in the batteries at either port, and there was certainly every reason to believe that an attack conducted with vigour and decision might have been completely successful, resulting in the destruction of one (if not more) of our great naval arsenals, with all its contents, at the commencement of hostilities!

Happily for us, we were spared this national disgrace and humiliation. After a short period of most

intense anxiety to those aware of our weakness, we gladly accepted such satisfaction as the French Government could be induced to offer, the danger passed away without any general feeling of alarm having been excited, and the attention of the Government became so exclusively directed towards domestic occurrences, that although several measures of importance were soon afterwards adopted for the better defence of our naval arsenals (in compliance with the suggestions of a Commission appointed in 1845 to inspect and report on this subject), they have since been carried into execution so tardily, that, out of a force of large steam guard-ships for the special defence of our ports, ordered to be equipped in 1846, consisting of four sail of the line and four frigates, only one is now ready for service, and the remainder will scarcely be so before the end of the year. This delay is deeply to be regretted, because no plan could have been devised better calculated to defeat any sudden attack than that of having in constant readiness a formidable squadron of this description, propelled by steam as well as sails, and far superior in point of force to any flotilla of French steamers which might attempt a descent on our coast.

The military recommendations of the Commission to which I have already alluded, were, however, carried into effect with more promptitude and effect. Sheerness, entirely defenceless in 1844, is now by the completion of the lines commenced in 1845, tolerably secure against a "coup de main," while the improvements in the fortifications at Portsmouth and Plymouth, suggested by the same Commission, have un-

doubtedly added materially to the strength of our defences there.

It was also wisely determined at the same time (1845) to equip a respectable squadron for home service, and this measure (fortunately since steadily persevered in) has proved of the greatest national advantage, not only by the state of constant preparation which it has manifested to the world, but by the exercise and instruction which it has enabled us to afford to our rising generation of officers, hitherto too little accustomed to naval evolutions.

Our Steam Navy has also been greatly increased in numbers, as well as in force, since 1842, and if due care is taken for its preservation, and a very large proportion of it kept at home in a state of perfect preparation and efficiency, I see no reason why we should not be able to assemble at the shortest notice a force of this description equal, if not superior, to any which could be brought against us.

Our new steam Basins and Factories at Portsmouth and Devonport, now rapidly advancing towards completion, will materially facilitate this object, and when the expense, as well as the importance of this part of our Naval force is considered, we may reasonably hope that it will not be unnecessarily or injudiciously employed on services which a little patience and arrangement would enable us to execute by ordinary means, but kept chiefly in reserve for more serious occasions.

Our attention should now also be specially directed towards the construction of a considerable number of steam gun-boats, carrying two guns, drawing very

little water, and intended not only as an additional defence for our arsenals, but for the general protection of our coasts, convoys, and unfortified harbours. Every one who recollects the Danish and Spanish gun-boats will bear testimony to the importance as well as great efficiency of such a force, which is peculiarly calculated for purposes of this description, and would probably during war almost entirely supersede the equally costly arrangements by which we were formerly accustomed to provide for these services.

It will be seen by what I have said that I am not disposed fully to coincide in opinion with those who entertain what appear to me somewhat exaggerated fears with respect to the existing dangers of the country, and who seem to assume that our Naval superiority can no longer avail us, but I am prepared to admit that we are far more exposed to a surprise than at any preceding period of our modern history, and that if our military preparations are not matured on the scale which the occasion so manifestly requires, it is perfectly possible that an active and enterprising enemy might avail himself of some favourable opportunity for suddenly throwing a large body of men on our shores, and inflicting on us some grievous and disgraceful injury, before we were prepared to repel him.

It becomes us, therefore, while time is still afforded us, to revise, without a moment's delay, our whole military arrangements—to remodel them on a system more adapted to actual circumstances and modern warfare, under a firm conviction, that disciplined and

experienced invaders can only be successfully opposed by troops of a similar character and composition, and that raw levies, acting without confidence in themselves or their officers, would only augment our confusion and disasters.

With respect to our maritime population, it has always appeared to me that a certain *zone* or belt of country, extending perhaps ten miles inland from the coast, should be placed on a different footing from the remainder, and the whole population, capable of bearing arms so organized and distributed, that in the event of invasion the enemy would find himself surrounded by a hostile population, capable at least of narrowing his range for supplies, harassing his stragglers, closing on his line of march and communications, and thus materially diminishing that feeling of confidence and security with which he would probably expect to advance through an unarmed and unwarlike country.

These are, however, great military questions on which it would be presumptuous in me to enlarge, and on which we happily possess an illustrious Chief fully capable of advising and assisting us ; who (if we may give credit to current reports) has already strongly urged on Her Majesty's advisers the immediate consideration of this most important subject.

I should not, indeed, under these circumstances have ventured to offer any suggestions or remarks at this moment, if some letters lately published had not appeared to me calculated to excite exaggerated apprehensions and alarms, and to diminish in too great

a degree the confidence which the country may still rationally (although not blindly or implicitly) repose in "Britain's best bulwarks—her wooden walls;" but I should deeply regret and most earnestly deprecate any further postponement of those military precautions by which our defensive position can alone be rendered secure and satisfactory.

The history of the last fifty years will sufficiently prove that in 1796 and 1797, as well as in 1804 and 1805, we very narrowly escaped witnessing all the calamities of war in our own country, notwithstanding our great naval superiority; and at the latter period Buonaparte only reluctantly abandoned his projects, and withdrew his army from the camp at Boulogne, when he saw an armed population of 500,000 men organized and prepared to receive him. Let us, therefore, while time is still afforded us for calm and deliberate arrangements, hasten to complete those defensive measures which our duty to our own country, as well as to Europe and our Allies, so imperiously demands.

It may not perhaps be generally known that our supineness in this respect has excited equal uneasiness and dissatisfaction in Germany, where such great exertions have been made, and such heavy expenses submitted to, for the purpose of strengthening their own frontier; and it has been said, (certainly not without foundation), that our own negligence of similar precautions would, in all probability, be the cause of the next general war, by holding out a temptation too

strong for France to resist at some favourable moment.*

If a dread of expense should tempt us still to hesitate, let us recollect the pecuniary losses and sufferings of all those nations who had the misfortune of experiencing the miseries inflicted by invading armies within our own recollection; and if these considerations are insufficient, let us cast our eyes towards Mexico, and view the conquest of that country by a mere handful of invaders, who, unopposed by disciplined troops, or military experience, have defeated and dispersed whole hosts of irregulars, and are now likely to dictate ignominious terms of peace in the capital itself.

W. B.

London,

January 3, 1848.

* See a pamphlet lately published on this subject by Baron Maurice de Sellon, since translated by Captain Addison, of Chelsea Hospital.

A P P E N D I X.

I.

THE DUKE OF WELLINGTON'S LETTER.

[The following is a copy of the letter addressed by the Duke of Wellington to Sir John Burgoyne, extracted from the *Morning Chronicle*.]

Strathfieldsaye, 9th Jan. 1847.

TO MAJOR-GEN. SIR JOHN J. BURGOYNE; K.C.B. &c.

MY DEAR GENERAL,

Some days have elapsed, indeed a fortnight has, since I received your note, with a copy of your observations on the possible results of a war with France, under our present system of military preparation.

You are aware that I have for years been sensible of the alteration produced in maritime warfare and operations by the application of steam to the propelling of ships at sea.

This discovery immediately exposed all parts of the coasts of these islands, which a vessel could approach at all, to be approached, at all times of the tide and in all seasons, by vessels so propelled, from all quarters. We are in fact assailable, and at least liable to insult, and to have contributions levied upon us on all parts

of our coast ; that is, the coast of these, including the Channel Islands, which to this time, from the period of the Norman Conquest, have never been successfully invaded.

I have in vain endeavoured to awaken the attention of different Administrations to this state of things, as well known to our neighbours (rivals in power, at least former adversaries and enemies) as it is to ourselves.

I hope that your paper may be attended with more success than my representations have been.

I have above, in few words, represented our danger. We have no defence, or hope of defence, excepting in our fleet.

We hear a great deal of the spirit of the people of England, for which no man entertains higher respect than I do. But unorganized, undisciplined, without systematic subordination established and well understood, this spirit, opposed to the fire of musketry and cannon, and to sabres and bayonets of disciplined troops, would only expose those animated by such spirit to confusion and destruction. Let any man only make the attempt to turn to some use this spirit in a case of partial local disturbance ; the want of previous systematic organization and subordination will prevent him even from communicating with more than his own menial servants and dependants ; and while mobs are in movement through the country the most powerful will find that he can scarcely move from his own door.

It is perfectly true that, as we stand at present, with our naval arsenals and dock-yards not half garrisoned, 5,000 men of all arms could not be put under arms, if

required, for any service whatever, without leaving standing without relief all employed on any duty, not excepting even the guards over the palaces and the person of the Sovereign.

I calculate that a declaration of war should probably find our own garrisons of the strength as follows, particularly considering that one of the most common accusations against this country is, that the practice has been to commence reprisals at sea, simultaneously with a declaration of war, the order for the first of which must have been issued before the last can have been published.

We ought to be with garrisons as follows at the moment the war is declared :—

Channel Islands (besides the militia of each well organized, trained, and disciplined)	10,000 men.
Plymouth	10,000 men.
Milford Haven	5,000 men.
Cork	10,000 men.
Portsmouth	10,000 men.
Dover	10,000 men.
Sheerness, Chatham, and the Thames	10,000 men.

I suppose that one-half of the whole regular force of the country would be stationed in Ireland, which half would give the garrison for Cork. The remainder must be supplied from the half of the whole force at home stationed in Great Britain.

The whole force employed at home in Great Britain and Ireland would not afford a sufficient number of men for the mere defence and occupation, on the breaking out of war, of the works constructed for the

defence of the dock-yards and naval arsenals, without leaving a single man disposable.

The measure upon which I have earnestly entreated different Administrations to decide, which is constitutional, and has been invariably adopted in time of peace for the last eighty years, is to raise, embody, organize, and discipline the militia of the same numbers for each of the three kingdoms united as during the late war. This would give a mass of organized force amounting to about 150,000 men, which we might immediately set to work to discipline. This alone would enable us to establish the strength of our army. This, with an augmentation of the force of the regular army, which would not cost £400,000, would put the country on its legs in respect to personal force, and I would engage for its defence, old as I am.

But as we stand now, and if it be true that the exertions of the fleet alone are not sufficient to provide for our defence, we are not safe for a week after the declaration of war.

I am accustomed to the consideration of these questions; and have examined and reconnoitred, over and over again, the whole coast from the North Foreland, by Dover, Folkstone, Beachy Head, Brighton, Arundel, to Selsey Bill, near Portsmouth, and I say that, excepting immediately under the fire of Dover Castle, there is not a spot on the coast on which infantry might not be thrown on shore, at any time of tide, with any wind and in any weather, and from which such body of infantry, so thrown on shore, would not find within the distance of five miles a road into

the interior of the country through the cliffs practicable for the march of a body of troops.

That in that space of coast (that is, between the North Foreland and Selsey Bill,) there are not less than seven small harbours or mouths of rivers, each without defence, of which an enemy, having landed his infantry on the coast, might take possession, and therein land his cavalry, and artillery of all calibre, and establish himself and his communication with France.

The nearest part of the coast to the metropolis is undoubtedly the coast of Sussex, from the east and west side of Beachy Head and to Selsey Bill. There are not less than twelve great roads leading from Brighton upon London, and the French army must be much altered indeed since the time at which I was better acquainted with it, if there are not now belonging to it forty chefs d'état Major-General capable of sitting down and ordering the march to the coast of 40,000 men, their embarkation, with their horses and artillery, at the several French ports on the coast; their disembarkation at named points on the English coast; that of the artillery and cavalry in named ports or mouths of rivers, and the assembly at named points of the several columns; and the march of each of these from stage to stage to London.

Let any man examine our maps and road-books, consider of the matter, and judge for himself.

I know of no mode of resistance, much less of protection from this danger, excepting by an army in the field capable of meeting and contending with its formi-

dable enemy, aided by all the means of fortification which experience in war and science can suggest.

I shall be deemed fool-hardy in engaging for the defence of the empire with an army composed of such a force of militia. I may be so. I confess it, I should infinitely prefer, and should feel more confidence in, an army of regular troops. But I *know* that I shall not have these. I may have the others; and if an addition is made to the existing regular army allotted for home defence of a force which will cost 400,000*l.* a-year, there would be a sufficient disciplined force in the field to enable him who should command to defend the country.

This is my view of our danger and our resources. I was aware that our magazines and arsenals were very inadequately supplied with ordnance and carriages, arms, stores of all denominations, and ammunition.

The deficiency has been occasioned in part by the sale of arms, and of various descriptions of ordnance stores, since the termination of the late war, in order to diminish the demand of supply to carry on the peace service of the ordnance, in part by the conflagration of the arsenal which occurred in the Tower some years ago, and by the difficulty under which all governments in this country labour in prevailing upon Parliament, in time of peace, to take into consideration measures necessary for the safety of the country in time of war.

The state of the ordnance, arms, ammunition, &c. in magazines, is in part the question of expense, and perhaps in some degree one of time.

I would recommend to have an alphabetical list of the stores examined by a committee, and made out in form, as upon the enclosed half-sheet of paper, by ascertaining what there was in 1804, and what there is in store now, of each article, and the difference between the two accounts.

I have taken the year 1804 as the standard, as that was the year in which the invasion was threatened. It was previous to the employment of the armies in the Peninsula or North America ; in short, as nearly as possible similar to the political circumstances in which we stand at this moment, excepting that we are now at peace with France—we were then at war.

A fourth column would be the estimate of the expense of bringing the magazines to the state in which they were in 1804.

With this information before him, the Master-General could give the Government accurate information of the wants of ordnance, arms, ammunition, and stores in the magazines of the country.

You will see from what I have written that I have contemplated the danger to which you have referred. I have done so for years. I have drawn to it the attention of different administrations at different times.

You will observe, likewise, that I have considered of the measures of prospective security, and of the mode and cost of the attainment.

I have done more. I have looked at and considered these localities in great detail, and have made up my mind upon the details of their defence.

These are questions to which my mind has not been unaccustomed. I have considered and provided for the^e defence, the successful defence, of the frontiers of many countries.

You are the confidential head of the principal defensive part of the country. I will, if you and the Master-General of the Ordnance choose, converse or otherwise communicate confidentially with you upon all the details of this subject; will inform you of all that I know, have seen, and think upon it, and what my notions are on the details of the defensive system to be adopted and eventually carried into execution.

I quite concur in all your views of the danger of our position, and of the magnitude of the stake at issue. I am especially sensible of the certainty of failure if we do not, at an early moment, attend to the measures necessary to be taken for our defence; and of the disgrace—the indelible disgrace of such a failure.

Putting out of view all the other unfortunate consequences, such as the loss of the political and social position of this country among the nations of Europe, of all its allies, in concert with and in aid of whom it has in our own times contended successfully in arms for its own honour and safety, and the independence and freedom of the world.

When did any man hear of allies of a country unable to defend itself?

Views of economy of some, and I admit that the high views of national finance of others, induce them

to postpone those measures absolutely necessary for mere defence and safety under existing circumstances, forgetting altogether the common practice of successful armies in modern times, imposing upon the conquered enormous pecuniary contributions, as well as other valuable and ornamental property.

Look at the course pursued by France in Italy and Russia ; at Vienna repeatedly, at Berlin, at Moscow —the contributions levied, besides the subsistence, maintenance, clothing, and equipment of the army which made the conquest ! Look at the conduct of the allied army which invaded France, and had possession of Paris in 1815 ! Look at the account of the pecuniary sacrifices made upon that occasion, under their different heads of contributions, payments for subsistence, and maintenance of the invading armies, including clothing and other equipments, payments of old repudiated State debts, payments of debts due to individuals in war in the different countries of Europe, repayment for contributions levied, and moveable and immoveable property sold in the course of the revolutionary war.

But such an account cannot be made out against this country. No ! but I believe that the means of some demands would not be wanting. Are there no claims for a fleet at Toulon, in 1793 ? None for debts left unpaid by British subjects in France, who escaped from confinement under cover of the invasion, in 1814, by the allied armies ? Can any man pretend to limit the amount of the demands on account of the *contributions de guerre* ?

Then look at the conditions of the treaties of Paris, 1814, 1815.

France having been in possession of nearly every capital in Europe, and having levied contributions in each, and having had in its possession or under its influence the whole of Italy, Germany, and Poland, is reduced to its territorial limits as they stood in 1792.

Do we suppose that we should be allowed to keep—could we advance a pretension to keep—more than the islands composing the United Kingdom, ceding disgracefully the Channel Islands, on which an invader had never established himself since the period of the Norman Conquest?

I am bordering upon seventy-seven years of age passed in honour.

I hope that the Almighty may protect me from being the witness of the tragedy which I cannot persuade my contemporaries to take measures to avert.

Believe me ever yours sincerely,

WELLINGTON.

II.

LETTER TO LORD HADDINGTON.

[This letter was (with Lord Haddington's permission) read before the Committee of Enquiry in 1848, and is published with my evidence. W. B.]

Private and confidential.

Admiralty, Sept. 22, 1844.

MY DEAR LORD HADDINGTON,

You will easily believe that during the late alarm, I was an anxious and uneasy spectator of our imperfect state of preparation against sudden hostilities, and as the danger has (perhaps only for the moment) blown over, I think I cannot better fulfil my duty to yourself, and to the Government, of which you are a member, than by offering my opinion on the present state of our naval arrangements, and suggesting such improvements as appear to me indispensably necessary.

The subject is too important and too extensive to be satisfactorily discussed in incidental conversation, and I have therefore preferred placing my opinions before you in this shape, for your consideration, as well as that of my colleagues in office.

I think it unnecessary to dwell at any length on the formidable preparations which France is openly making in all her great Naval Arsenals for the equipment of her navy, and more especially of armed steamers of the largest class. In this latter description of force,

and in their establishments for its construction and maintenance, they are already far beforehand with us, and all our information tends to prove that no expense is spared, and no exertions thought too great, which have this (their favourite object) in view.

On this point I need only refer to Mr. Grant's recent report on the perfect state of preparation in which he found all the great Naval Arsenals at Rochefort, L'Orient, Indret, Brest, and Cherbourg :— the number of large steam vessels either quite ready, or rapidly advancing towards completion, and the well-considered and unceasing efforts making to place this force, more especially, on the most efficient footing.

It appears that seventeen of the largest class, considerably exceeding in size any of ours, have been lately built under the denomination of Transatlantic Packets, but which are in reality most powerful War Steamers, of 450 horse power, and capable of carrying the heaviest guns, as well as a very large number of troops for any short passage.

The workshops for the manufacture and repair of engines at these ports are on the grandest and most extensive scale, and when complete will very far exceed any we have in progress.

In short, without going into further details it is fully evident that France is preparing with the utmost possible rapidity and regardless of expense for great naval operations, and we already see the exertions they are making, even during peace, to out-number us on every foreign station.

Without alluding to the Mediterranean, their force

in the Pacific and West Indies is superior to ours, and a strong squadron was, at the date of the last accounts, expected in China.

There is, therefore, *a possibility* at least of their striking some serious blow in the event of hostilities breaking out without any very long previous expectation. It is, I believe, now generally known, that in 1840 the French Naval Officers most urgently pressed their Government for permission to attack our ships in the Mediterranean, while they were dispersed and very weakly manned, without any previous declaration of war. The Prince de Joinville alludes to this circumstance in the ninth page of his Pamphlet, and almost admits the fact I have stated. In the present temper of the French Navy a similar temptation may prove irresistible at some critical moment, and should as far as possible be guarded against. It is, however, to our defective state of preparation at home and to the insufficiency of our means and arrangements for fitting out a fleet with certainty and celerity, that I would more especially entreat your attention.

In all former times it was our almost invariable practice (even when appearances were far less menacing) to keep up the "*nucleus*," at least, of a respectable squadron at home. Three guardships at each port sufficiently manned for those times, and for the small ships then in use, were kept in a constant state of preparation, and by assisting as they did in rapidly fitting out an additional number of ships on any emergency, enabled us on the shortest notice to assemble at Spithead, a respectable fleet of towards

twenty sail of the line. There is every reason to believe that in the years 1787, 1790 and 1791, hostilities with France, Spain, and Russia were averted by the rapidity with which our naval preparations were completed on each of the three occasions in question, and it is equally instructive and important to remark, that the too hasty reduction of our naval force in 1792, under an impression that the French Revolutionary Government was peaceably disposed towards us, most seriously retarded our equipments when war unexpectedly broke out early in 1793, and that after dispatching a squadron to the Mediterranean, and the necessary reinforcements to our foreign stations, our Channel Fleet was, until the following year, scarcely equal to the French in ships of the line, and so inferior in frigates and smaller cruizers, that our trade in consequence suffered very severely, and a most serious outcry was raised against our Naval Administration.

It is impossible not to admit that we are at this moment entirely unprepared for any sudden alarm or danger. Our whole force of ships of the line fit for sea in Europe (*including one in the Mediterranean*) amounts to five, while we have no reserve of seamen, or any means of obtaining them, which would ensure the rapid equipment of any additional force ; and it is important to observe here, that on those occasions to which I have before alluded, impressment was considered as a matter of course, and instantly resorted to, whereas it has now been so violently and openly declaimed against, and so publicly reprobated, that I should very much fear it will no longer be as peaceably

submitted to as heretofore, and that resistance may be anticipated where a sufficient force is not at hand to prevent it. A reserve of at least 5000 seamen has therefore become a measure of urgent necessity. This number distributed between our three principal arsenals, Portsmouth, Devonport, and Sheerness, will not be more than sufficient to equip a respectable squadron on any sudden emergency, and is by no means equal to the force of a similar description in all the French ports. Mr. Grant reports 2000 seamen at Brest ready for service, 600 at L'Orient and 800 at Rochefort. The establishment at Cherbourg is not stated, but is probably not inferior to the others, and that at Toulon very far exceeds any of them, from eight to ten sail of the line being kept constantly in commission at this latter port.

It is therefore obvious that except we adopt a similar system our fleets will inevitably be much longer getting ready than the French, and our ships manned with crews hastily got together and imperfectly organized and disciplined, will be by no means on that footing of superiority to their opponents which it should be our great object to secure.

Every thing will depend on the result of the first naval action. If it is gloriously successful all Europe will be with us; but if it should unfortunately be indecisive or doubtful, like Byng's at the commencement of the Seven Years War, or Keppel's in 1778, who can foretell the evil consequences which may follow? It must be constantly borne in mind also, that this first action will, in all human probability, be

fought in the Mediterranean, where the French keep their best fleet constantly in activity, well exercised, and commanded by their most promising officers; and if by any want of preparation on our part they are permitted to obtain an even temporary superiority in that sea, Egypt or Minorca may be seized, or even the safety of Malta seriously endangered, at the commencement of hostilities.

Another very important advantage will be gained by the adoption of this arrangement as a permanent part of our naval establishment. The exercise of our ships in the evolutions of a fleet, which has so long ceased to form a part of our system, may be regularly and carefully attended to. Scarcely any of that generation of officers, on whom the operations of war will devolve, have even seen a sufficient number of ships collected to perform even the commonest manœuvres together, and if timely measures are not taken to remedy this want of experience, the ill effects will appear on some very serious occasion. I shall therefore propose, that the whole of the ships which this arrangement will enable us to keep in commission at home shall be assembled at Spithead early in April, and exercised during the summer months both at sea and at anchor, in all those various evolutions which would naturally suggest themselves to the mind of any able and experienced officer appointed to command them, concluding in the month of August or September by an inspection or review, at which the Board of Admiralty should be present.

It is unnecessary to enlarge on the good effects

which must result from this most necessary measure ; emulation will be excited, instruction gained, latent talent developed, confidence and experience acquired, and in short all those advantages obtained of which the British Navy stands most in need at the present moment, for it cannot be too strongly or seriously impressed on the minds of Her Majesty's Government, that the advanced age of all the superior officers will inevitably render their past experience and services of very little avail in the event of future hostilities, and that we must turn our eyes towards those who are next in rank and seniority for filling all important and active commands.

This circumstance renders exercise and instruction afloat doubly necessary, and it is indeed the only mode by which the Board of Admiralty can possibly ascertain, with any precision, the comparative merits of officers, and to whom the execution of important services can safely be confided.

We should also be able to avail ourselves of this opportunity for making, with more care and leisure than has hitherto been practicable, all those experiments and trials of our new classes of ships, which have been hitherto too hastily carried on. It is obvious, that great questions of this nature, involving an enormous expenditure, cannot be too carefully or minutely investigated ; and when we see the differences of opinions and conflicting statements which are still in circulation with respect to the qualities and comparative merits of several new ships of the most important description, it is, in my opinion, our duty to

set all doubts on this subject at rest, by trials of sufficient length to enable the officer commanding to report fully and finally upon them, after some months of continuous observation at sea. This is particularly desirable with respect to our large frigates, about which we have been doubting and hesitating for many years, and in which the French are now very superior to us in numbers.

It is necessary to explain, that I do not propose an *increase* in our number of seamen to the full amount suggested ; 3,000 would probably suffice, in amount to the crews of three flag-ships, and those belonging to the Ordinary at each port, which, under a different arrangement, might form the crews of three effective ships, and exercise during the summer months.

It is unnecessary to add, that this force would be equally disposable for manning steam vessels or troop-ships on any sudden emergency requiring reinforcements to our Colonies, &c. ; and I very strongly recommend our being always prepared with a certain number of ships of this latter description, completely fitted for the conveyance of troops ; and that this object be kept in view in our arrangements for disposing of our half-worn small ships of the line, and frigates, which are particularly applicable to this purpose.

I will not unnecessarily detain you by apologizing for the unavoidable length of this paper. You feel as deeply as myself the vital importance of the subject I have attempted to discuss ; and if my suggestions can lead towards perfecting and maturing arrangements, on which, not only our own personal character and

credit, but the safety of the Empire depend, my object will be fully attained. I am most anxious that Her Majesty's Government should clearly understand, that "advance ships," and hired steamers, *without men*, would prove a dangerous delusion. That a fleet must be organized, instructed, and disciplined, before it can safely be brought into action with a formidable rival, and that no expenditure can be more wisely sanctioned, or satisfactorily justified, than the comparatively trifling sum which, if judiciously and faithfully appropriated, will be found amply sufficient for this important purpose.

I am, dear Lord Haddington,

Very faithfully yours,

WM. BOWLES.

[Extract from the French Newspaper, "Le Censeur," of the 6th January, 1842.]

Dans un travail intéressant sur les progrès des armées régulières en Orient et en Afrique, la Sentinelle jette un coup d'œil rétrospectif sur ce qui aurait pu advenir dans le cas où notre gouvernement eût encouragé Mehemet Ali et laissé notre flotte dans le Levant.

Qu'il nous soit permis, dit ce journal, de rappeler à cette occasion le plan adressé par Mons. l'Amiral Lalande à Mons. Thiers, et dont on n'a pas assez parlé. Mons. Lalande était à Tenedos, pres de l'embouchure des Dardanelles avec dix Vaisseaux; il y avait au même mouillage dix Vaisseaux Anglais, sous

les ordres de Contre-Amiral Louis. Celui-ci en détacha deux pour les envoyer en Syrie; aussitôt M. Lalande, qui venait d'avoir connaissance du traité du 15 Juillet, écrivit à M. Thiers, qu'on pouvait tirer une vengeance éclatante de la mauvaise foi Britannique, qu'il s'engageait à brûler ou à prendre les huit vaisseaux Anglais, mouillés près de lui, puis à s'emparer des deux vaisseaux qui avaient été expédiés en Syrie; qu'il compléterait l'armement des onze Vaisseaux Egyptiens et des neuf vaisseaux Turcs, réunis dans le Port d'Alexandrie, et les conduisait à Toulon, où l'on rassemblerait un corps de 30,000 hommes, sous le prétexte de renforcer l'armée d'Afrique; que la France, ayant alors, tous compris, de 35 à 40 Vaisseaux, pouvait jeter ces 30,000 hommes sur les côtes de l'Irlande, et prendre les Anglais à l'improviste, et que deux divisions Navales iraient ensuite s'emparer des établissements de la Grand Bretagne dans l'Inde. Il suffit d'un simple instinct pour voir tout de suite que ce plan ne pouvait éprouver le moindre obstacle, et s'il eût été exécuté c'en était fait de la puissance Anglaise; un pareille occasion ne se retrouvera pas peut être dans trois siècles.

Napoléon aurait compris l'Amiral Lalande in lui aurait donné toutes les instructions nécessaires, il l'eût nommé Grand-Amiral. Savez-vous ce que fit M. Thiers? Il envoya un paquebot à M. Lalande, et l'invita à profiter de son retour pour rentrer immédiatement en France.

Quelques jours après, l'escadre du Levant était rappelée à Toulon, et les députés ministériels eurent l'ef-

fronterie de dire à la Tribune, sans être contredits, que les Vaisseaux étant au bout du télégraphe, se trouvait plus rapprochés de l'Égypte que s'ils étaient restés à Smyrne ou à Ourlac.

III.

Suggestions for a Squadron of Exercise to be assembled as early in the Spring of 1845 as may be practicable.

Dec. 31, 1844.

IT being desirable to combine exercise and experiment, as far as possible, and to avoid all unnecessary expense, it appears advisable that two three-deckers only should be at sea next year, namely, the Queen, and St. Vincent, and that the crews (1500 men) of the flag-ships at Sheerness, and Devonport, should be lent to other ships during the summer, or kept incomplete, as may be most convenient.

I think it very desirable that the Albion should be tried with a ninety-gun ship on two decks. The Nile, London, or Rodney. The French and Americans are building many of this class, and we should ascertain the comparative merits of our own without delay.

The trial of the Vanguard, Superb, and Canopus, together, would determine the two questions which seem still undecided, or at least not fully set at rest, namely, whether our naval architecture has improved,

and whether our new two-deckers of the Vanguard's class, are superior in sailing and other good qualities to the French eighty-gun ships, formerly considered the best two-deckers in the world; and also, whether the late alteration in the form of the bow gives an advantage to the Superb over the Vanguard, these ships being in all other respects precisely alike.

It may (and no doubt will, on some future occasion), be very important to possess a certain proportion of ships of the line, calculated for service in the North Sea and Baltic, by a lighter draught of water than that of our general class of two-deckers, which, from their increasing size would be found unsafe in those seas; and the Boscawen and Cumberland, having been built with this particular object in view, it is very necessary that their qualities should be ascertained without delay; I therefore propose adding the Cumberland to the squadron.

It is even still more important that some determination should be speedily taken with respect to the model on which our large frigates should in future be built. This is a subject on which we have been doubting and hesitating for many years, and we cannot too soon take the necessary measures for deciding on a point of such vital importance to the success of our naval operations at the commencement of future hostilities. The French are so very superior to us in ships of this description, that we shall find their cruising predatory squadrons very difficult to cope with, and be again reduced to the same humiliating course of sending ships of the line to take care of our

frigates, which during the war with America so much lowered our naval reputation.

Except a few razéed seventy-fours, which are now fast verging towards decay, and which can only be relied on for a short time longer, the Vernon is almost the only frigate in the service equal in force to the French and Americans of her class, and it is therefore extremely desirable to ascertain what her qualities and defects are, by actual trials with the fastest sailing ships in the service, before we commence any extended addition to our frigates of the largest class, of which a considerable number should be commenced with as little delay as possible. I should propose to place in competition with her the Warspite, President, or some other frigates of this class, whose qualities stand highest in general estimation.

The Inconstant, having established a high character, and being the only frigate of her class within reach, which can fairly compete with those built by Sir W. Symonds, I propose that she should be availed of during the summer, and tried against the Flora or Cambrian.

To these, which are the most serious and important questions for experiment and decision, will of course be added such additional minor trials as a careful consideration of the subject will naturally suggest. It is obvious that the papers moved for by Rear-Admiral Dundas, and laid before Parliament the end of June, have been called for with the view of charging the Admiralty with negligence in the performance of an important part of their duty, that of carefully ascer-

taining, by repeated and well-conducted trials, the real character of our newly constructed ships.

It is in vain to deny that these papers establish the fact, that sufficient attention has not hitherto been paid to this important point, that in the instances of the Queen and Vernon a whole three years' station was allowed to elapse without any sufficient trial, and that the Eurydice, a ship built by Rear-Admiral Elliot, as an improvement on Sir W. Symonds' twenty-six-gun frigates, and now above a year at sea, appears never to have been tried (or at least reported upon) with any ship of her class.

We cannot conceal from ourselves that these charges are capable of proofs, and I have reason to believe, that the Opposition intend to bring them forward. It is therefore necessary to adopt such measures with respect to the future as may at least enable us boldly to assert nothing of this kind can happen hereafter. Some one member of the Board should be specially charged with, and responsible to his colleagues for attending to all the details of trials and experiments. Where it is practicable he should superintend and conduct them in person, and while experimental ships are on foreign service he should very frequently examine the reports sent home respecting them, and see that their good or bad qualities are thoroughly tested and ascertained.

I am aware that the limited number of our seamen renders arrangements of this nature more difficult and intricate than they would otherwise be, but "where there is a will there is a way;" and I cannot persuade

myself that by an improved arrangement, especially by simultaneously relieving all our foreign stations after our summer exercise and trials are over, and by completing the ships proceeding abroad with men from those intended to remain at home, much more may not be done with a smaller increase of expense than we should incur if our present defective system is persevered in. As we should know exactly when the reliefs would proceed to their stations, the ships ordered home might, under ordinary circumstances, be directed to sail for England, on an appointed day, and a large sum would be saved in pay and victualling which is now expended in waiting for reliefs. And by this arrangement the additional advantage will be gained of having it in our power to form another squadron of exercise and trial by dispatching these reliefs in company, instead of separately, as far at least as their courses laid together. It cannot be too often urged or repeated that it is only by exercise and emulation that the former alertness and activity of the Navy can be restored. A ship exercising alone is like a ship trying her sailing alone, and an exaggerated opinion of its merits is almost always formed.

If, when the ships intended for home service dismantle, or go into harbour for the winter, it is determined to reduce their ships' companies to the extent lately proposed, I most earnestly recommend that this may not be done by hastily discharging at that season of the year (when employment is so difficult to obtain) any large number of their men. Nothing is so certain to create disgust and discontent among our

seamen as this want of kindness and consideration towards them, and any small saving which may arise is too dearly purchased at such a price.

My own opinion however is, that we should do wisely to revert to the scale of complements established in 1839, which was most carefully calculated and considered, and which is much more exactly adapted to the numerous varieties of ships actually existing in our Navy than the present scheme, and I should not permanently reduce our ships remaining at home below that peace establishment, although a considerable saving may be effected by discontinuing entries during the winter months and filling up no vacancies until February or March.

I do not in this paper enlarge on the various advantages which the Service will derive from seeing steam-vessels joined for almost the first time to our squadrons of exercise; they are too obvious to render any observations of mine necessary. The experiments which will naturally be tried must be in the highest degree interesting to every naval officer, and equally instructive to individuals, and beneficial to the Service at large.

I annex a list of the proposed squadron, distinguishing the ships already in commission from those for which men must be provided. I have not taken credit for the crew of the *Caledonia*, or the men belonging to the Ordinary at the different ports.

PROPOSED SQUADRON.

	Guns.	Men.	Men Wanting.
*Queen . . .	110	750	
*St. Vincent . .	120	750	
*Albion . . .	90	750	
Rodney . . .	90	750	750
*Superb . . .	80	700	
Vanguard . . .	80	700	700
Canopus . . .	80	700	700
Cumberland . .	70	600	600
*Warspite . . .	50	500	
Vernon . . .	50	450	450
*Cambrian . . .	36	350	350
*Inconstant . .	36	350	
			—
			3550

Those marked * are already in commission.

IV.

Suggestions for forming the Effective Portion of the " Ordinary," into a Reserve Force at each Naval Arsenal.

Dec. 1844.

UNDER the existing management the whole of what is termed the " Ordinary Establishment " is concentrated on board an old non-effective ship, not available for any warlike purpose, and until within the last few years the crews belonging to this part of the service were as non-effective as the ship, being old and half worn-out men, entered from motives of charity, favour, or interest, and wholly unfit for active service afloat.

In 1836 an order was given by the Admiralty directing that none but able-bodied seamen should be entered for this service, and since that period a body of from 4 to 500 men has existed at each of our Ports, certainly more available for general purposes than heretofore, but still without much organization or discipline, and commanded by officers unable or unwilling to serve afloat, and who obtain these appointments as a sort of convenient retirement.

It is unnecessary to enlarge on the inconvenience and insufficiency of this system, which is, after all, nearly as expensive as the best arranged one would be: but I will come at once to my own proposition, which is, to separate entirely the effective from the non-effective part of the ordinary; to leave on board the ship forming the present head-quarters of that establishment all the officers and men absolutely necessary for the due care and superintendence of the ships laid up in ordinary, and to transfer to an effective third-rate the whole of the seamen now considered available for general purposes, with a regular establishment of officers, &c. and in all respects ready for immediate service.

To this ship I propose attaching a division of advanced ships completely out of the hands of the dock-yard, and in all points fitted for sea, except rigging, armament, and provisions; to consist of one frigate of the first class, one of the second, one smaller one, two brigs or corvettes, and three steamers, and that such an arrangement be made of the officers and crews as may ensure the equipment of any one or more of these

at the shortest notice. If this plan should be approved of and adopted we shall immediately obtain, by a very trifling increase to an already existing establishment, four effective and full manned ships of the line, and on any occasion, when these are not required, a much larger number of frigates, brigs, or steamers, may be sent to sea with the least possible delay.

To the perfect success of this plan only two conditions are indispensable.

1st. That the officers of all classes shall be active, well conducted, and energetic men, fully capable of performing the important duties which will devolve on them with energy and intelligence.

2nd .That every due encouragement be given both to officers and men, carefully abstaining from all unnecessarily harassing and annoying duty, and above all things keeping strict faith with the men, and avoiding every thing which may wear the appearance of a breach of contract with them.

I insist the more strongly on this, because I know that temptations to such a line of conduct will very frequently arise. I propose that the crews of these ships should be considered as peculiarly available for all dock-yard duty during the six winter months, and under the present improved and complete arrangements I am of opinion their services may be dispensed with during the summer, when all these reserve ships should join the squadron of exercise, and take their part in the evolutions and manœuvres of the year.

W. B.

V.

That a Frigate and Steamer should be attached to the Excellent.

Admiralty, March 31st, 1845.

THE French have for some time past established a ship for the training of officers and men in Marine Artillery Practice, on the principle of the "Excellent," but with this improvement;—that their ship, which is a large frigate, is often at sea, and thus combines more real practice with science and theory, than our system can easily accomplish.

I would therefore suggest, that a frigate should be attached to the Excellent, to be manned and officered from that ship, and to exercise in the Channel during the summer months, for the purpose of trying at sea all those various experiments which can only be imperfectly performed in a stationary ship; and it will be perhaps a still greater improvement on our present system if an armed steam ship was (occasionally at least) placed at Sir T. Hastings' disposal for the same purpose, because under our present arrangement the seamen gunners are not as thoroughly acquainted as they should be with this part of their future service, and also because it is extremely desirable to ascertain by careful and well-conducted experiments, whether the very heavy Ordnance, which we are now introducing into our navy, possesses such decided advantages as to compensate fully for its enormous weight of metal and charge. I am, from all I have seen and

heard on this subject, very apprehensive that the 112 cwt. guns will be found too heavy and unmanageable for sea service under any difficult circumstances, and I am therefore extremely anxious that they should be thoroughly tried at sea before their use is more generally extended.

If these suggestions should be adopted, it will only be necessary to explain distinctly to men entering for the *Excellent*, that no alteration is made in the conditions of their service, and that the frigate forms part of the establishment, from which they will on no account be separated or removed against their own wishes.

I annex a letter from Sir T. Hastings with his opinion on this subject.

W. B.

Royal Naval College, April 2nd, 1845.

MY DEAR ADMIRAL,

I consider the stationary position of the *Excellent* to be most valuable for training officers and men in gunnery practice, and also in testing its theory: I would therefore adhere strictly to that system. But I was so convinced that the methods I have adopted for firing under the influence of the floating motions, in a gun-boat moored near the *Excellent*, which we can rock about with a heel of 12° each way, and a change of direction by means of a sweep or oar:—and 2ndly, in our boats at Spithead, were insufficient, that I applied when Sir James Graham was the First Lord, for

a brig or corvette, fitted with long guns, for the purpose of exercising the officers and crews at sea, not only in gunnery, but also, more especially the officers, in seamanship, but my request was not granted. I name this merely to show how entirely I concur with you in opinion, that advantage would be derived from the adoption of your plan of attaching a sailing ship to the *Excellent*, and the reasons for attaching a steamer are equally cogent.

Very truly yours,

(Signed) THOMAS HASTINGS, *Captain.*

To

REAR-ADMIRAL BOWLES, C.B.

Admiralty.

VI.

Two Letters to Lord Melville and Lord Auckland on the Selection of Men for the Coast Guard, and its employment in War.

Customs, November 9th, 1834.

MY LORD,

I have the honour of enclosing for your Lordship's perusal, the copy of a letter (*see page 225*) addressed to Lord Viscount Melville some years ago, on the subject of the Coast Guard.

Most of the suggestions it contains have, as your Lordship will observe, been since carried into effect, and the force organized and disciplined as it now is, and extended to almost every part of the Coast of the

United Kingdom, forms so new and important a feature amongst our Naval Establishments, and has become so applicable to warlike as well as revenue purposes, that I am sure your Lordship will not disapprove of my submitting, for your consideration, some further observations, which a long and careful consideration of the subject induce me to hope may not be altogether unworthy of attention.

I annex a return of the whole force under my orders, by which your Lordship will see that, including Officers, crews of cruizers, &c., the Coast Guard at this moment amount to nearly 6000 men, of which 3808 are stationed in England, 1798 in Ireland, and 385 in Scotland.

The question which naturally arises is, in what manner this force may, on the commencement of hostilities, be rendered immediately available, and I have no hesitation in saying, that if it were employed in the manner I am about to propose, it might perform most useful services, and effectually protect our Coasts, Trade and Revenue.

A reference to the history of former wars, and especially to that which commenced in 1793, will point out the very great difficulties which all our Naval Administrations have had to contend with during the first year of hostilities, especially where the war has broken out unexpectedly.

It has been of course impossible to disregard the first and paramount object of providing strong fleets for the Channel and Mediterranean, reinforcements for

all our Foreign Stations, &c., and to these higher considerations the protection of our Coasts and Trade have been too often unavoidably sacrificed, until the injury we have sustained from the enemy's privateers has been seriously felt, and given rise to much clamour and complaint.

Even at the later periods of the last war, and when our Naval Force was at its highest scale, both as to numbers and efficiency, experience proved the extreme difficulty of effectually protecting our Coasting Trade against an active and enterprising enemy; our severe winter gales too often defeat every arrangement which can be formed, and our cruizers, however numerous and well stationed, have always after a few days of bad weather, been so completely dispersed, that the enemy's privateers, waiting quietly in port until the gale abated, have sallied out and done much mischief, before our ships could possibly resume their stations.

It is unnecessary for me to point out that the use of steam vessels will, it may be hoped, in a great degree, remedy this most serious difficulty; and this brings me to the propositions with respect to the employment of the Coast Guard which I am desirous of submitting for your Lordship's consideration.

A certain number of small armed steam vessels, carrying each one or more long gun, officered and manned by the Coast Guard, and stationed on those parts of the coast on which ships of war cannot safely cruise in bad weather, and where the harbours are too small to shelter them, (although perfectly safe and

accessible to steam vessels,) would, in my opinion, form a most excellent and formidable protection for the whole coast of the United Kingdom, and a most useful local auxiliary to all those more extended measures which circumstances might dictate.

I need not at this moment occupy your Lordship's time in recapitulating all the points at which I would propose to station the force in question; Scilly, Penzance, Falmouth, Dartmouth, Weymouth, Littlehampton, and Newhaven, might all be made most useful ports of rendezvous for armed steam vessels; and in the North Sea, where a ship of war can now with difficulty find a safe anchorage between the Downs and Leith Roads, steam vessels stationed at Harwich, Yarmouth, and in the Humber and Tyne, as well as at Berwick, Dundee, &c., would render any attempt of the enemy's privateers to molest our trade on the east coast of the United Kingdom infinitely more hazardous than heretofore.

The west coast of Ireland, so much dreaded by our cruisers, and the scene of so many melancholy shipwrecks, might be excellently protected in the same way by a force stationed at those salient points which have small but secure harbours, such as Ventry, Clifden, Westport, Killibegs, &c. while the entrances to the St. George's and Bristol Channels, where the American privateers did so much mischief during the last year of the war, might be completely swept by a force having its rendezvous at Waterford and Milford.

I have thus endeavoured, as briefly as possible, to

put your Lordship in possession of my ideas on this important subject ; one great advantage, as it appears to me, would be, that both officers and men, being on the spot, and completely armed and organized, the whole system would come into full operation and activity the moment the steam vessels arrived in the different districts, without in any degree interfering with our other most important preparations, but on the contrary preventing the attention both of the Admiralty and the commanders-in-chief at our naval arsenals being perpetually diverted from greater objects by applications for protection and assistance ; and I should observe, that the Coast Guard is peculiarly calculated for this particular service, both from the exact local knowledge it may be presumed to possess, and also because a considerable proportion of the force is composed of men who have passed the prime of life, and are consequently much better calculated for service in a steam vessel than in a ship of war.

It must also be recollected, that the Coast Guard men, having been promoted from the navy to what is considered a superior situation, and enjoying higher pay and advantages, will serve much more cheerfully and satisfactorily as a separate corps, which should however, in my opinion, on the commencement of hostilities, be placed under martial law, and transferred immediately to the sole command of the Admiralty.

The number and distribution of the steam vessels, their establishment of officers and men, and many other points of a similar nature, being merely matters

of detail, may be discussed and arranged hereafter, if your Lordship should approve of the principle of the plan which I have now ventured to suggest.

I have the honour to be,
My Lord,
Your Lordship's most obedient Servant,

WM. BOWLES,
Comptroller-General of the Coast Guard.

To the Lord AUCKLAND,
&c. &c. &c.

Coast Guard Office, April 21st, 1826.

MY LORD,

I beg leave to lay before your Lordship some observations which I feel it my duty to offer on the Coast Guard of the United Kingdom, which, it appears to me, might, by the changes in its organization I am about to suggest, be rendered in many respects a more useful and efficient force for all general purposes, both in peace and war, and at the same time, hold out an additional inducement to volunteers entering early in life into the Royal Navy. The office I have the honour to hold has given me very frequent opportunities of observing the eagerness with which a boatman's appointment in the Coast Guard is sought for, and when the pay and advantages of this service are considered, this is perfectly natural; but I have often witnessed with regret, the disappointment and discouragement felt by many valuable seamen at finding that, without some powerful friend, their past

services in the Navy would not avail them in procuring this situation ; and I beg to submit to your Lordship, whether it would not be highly advisable, instead of conferring these appointments, as at present, on men without any peculiar claims or merits, that previous service in His Majesty's Navy (or in Revenue Cutters) should in future be indispensably requisite for admission into the Coast Guard.

The period of service will be a point for the consideration of the Board of Admiralty ; it appears, however, important to remark that, as the duties of the Coast Guard are extremely severe and laborious, the men, when appointed, should be still in the enjoyment of their full health and strength, and certainly not beyond thirty at the utmost ; perhaps ten years in the Royal Navy would be considered the proper term, and the hope of obtaining these appointments would induce men to enter early into the King's Service. The most satisfactory certificates of uniform good conduct, steadiness, and, above all, habitual sobriety, should be indispensably requisite, and it is unnecessary for me to point out the good effects which an impression of this nature would produce throughout the Navy. Upon any present emergency the Coast Guard, thus constituted and composed, may be depended on as a corps of tried and veteran seamen, in whose fidelity, steadiness, and discipline, full confidence may be placed : but I need not take up your Lordship's time by enlarging at length on the various services which it might perform either in peace or war.

For revenue purposes, I am persuaded that men so selected, with the present liberal pay and advantages, with respect to seizure rewards, will be found far preferable to those in either of the systems now in operation ; and during war, but more especially at the commencement of hostilities, the Coast Guard might perform the whole duties of batteries, signal posts, &c., and by manning small armed steam vessels, stationed at proper places, and attached to the districts, it would protect the whole line of coast, and keep all privateers at a distance much more effectually than any cruizers could do. It would also be extremely useful in collecting seamen for the Fleet, either by voluntary entry, or impressment, and being mixed, as the men must necessarily by their position be, with the whole maritime population of the kingdom, and affording, in their own persons, the strongest proofs of the advantages of the King's Service, it may be reasonably hoped, that they would assist not a little in encouraging great numbers of young men to engage cheerfully in the Royal Navy.

The preservation of lives and property, in cases of shipwreck, is not the least important of the duties of the Coast Guard, and when the frequency of shipwreck is considered, as well as the height to which the barbarous practice of general plunder on these occasions formerly prevailed, and its almost total suppression since the establishment of the Coast Guard, I am persuaded I need not point out the advantages which will arise from placing experienced seamen in situations where so much depends on thorough nautical

knowledge, as well as on steadiness and good conduct.

During peace, and while employed chiefly on revenue duties, it appears to me, that the Coast Guard may continue most advantageously, as at present, under the Board of Customs, but on hostilities commencing, they should be transferred to the Admiralty, and placed under martial law.

It is not necessary for me to trouble your Lordship, at present, with any further observations on the arrangements which would be required, if the proposition I have had the honour to suggest should be considered worthy the attention of His Majesty's Government. It would occasion no increase of expense, and is only intended to lead to the gradual formation of a force equally applicable to the important purpose of protecting a revenue of fifteen millions in time of peace, and of being instantly available for war service whenever it might be required.

I have the honour to be, &c.,

WM. BOWLES,

Comptroller-General of the Coast Guard.

To the Viscount MELVILLE,

&c. &c. &c.

A STATEMENT of the Number of Persons of the respective ranks, serving in the Revenue Coast Guard, on Shore and in Revenue Cruisers, in England, Scotland, and Ireland, shewing also the total number of Persons serving in the United Kingdom.

WHERE SERVING.	Number of Persons employed on Shore.					Number of Persons employed in Cruisers.					Total number of Persons on Shore and in Cruisers.
	Inspecting Commanders.	Chief Officers.	Chief Boatmen. Com. Boatmen. Boatmen.	Mounted Guard.	Total.	Commanders.	First Mates.	Second Mates.	Dep. Mariners, Mariners, Boys, Enginemen, and Firemen.	Total.	
England	37	275	2420	158	2890	28	30	23	837	918	3808
Scotland	6	32	183	"	221	4	4	4	152	164	385
Ireland	28	153	1324	"	1505	7	7	8	271	293	1798
Totals	71	460	3927	158	4616	39	41	35	1260	1375	5991

Suggestions with respect to the Arrangements necessary for carrying into effect the Plan proposed in the accompanying Papers.

July 22, 1845.

IF the suggestions contained in the enclosed letters to Lords Melville and Auckland, had been adopted and acted on, the whole Coast Guard would have been placed in a state of constant readiness for immediate transfer to the Admiralty and employment in the manner pointed out, on the shortest notice; and all the men entering the service would have been made fully aware of the conditions which, in that case, would naturally have accompanied their appointments, but the consideration of this important subject having been unfortunately hitherto postponed, various preparatory measures are now necessary before it can be carried into execution.

The Admiralty has frequently so long delayed, or disregarded, the selection of boatmen to fill the vacancies as they occurred, that the Board of Customs has been placed under the necessity of entering men from other sources, and a large portion of the Coast Guard are now therefore serving without any stipulation or understanding with respect to their future employment in war.

It will, under these circumstances, be necessary in the first instance to make a general communication to the whole force, of the intentions of Her Majesty's Government; acquainting them that it is proposed in

the event of hostilities breaking out at any future period, to transfer the Coast Guard from the Customs to the Admiralty, and to employ it as a local force either on shore, or on board armed steamers attached to the several districts. That all the men now serving in the Coast Guard would in that case retain their present pay, allowances and advantages of all descriptions, that they would on no account be drafted, or considered liable to serve in any other manner except as herein-before expressed, and that they would be entitled to all prize money, pensions and gratuities for wounds, hurts, &c. agreeably to the regulations of the Navy.

It will then be known whether any, and what number of men decline serving on these conditions; the number will probably be small, and chiefly confined to those who from age or ill health are unequal to active service; and this point once ascertained and established, such a *prospective* organization of the whole force should be made (without in the slightest degree hazarding the revenue by any interference with the existing duties of the Coast Guard) as may enable the Admiralty to judge with tolerable precision what numbers of effective men may be relied on at all the different points, for manning the steam vessels which would be distributed along the whole coast in conformity to the suggestions which my letters contain.

N.B. The whole number of men in the Coast Guard fit for service (exclusive of officers) is about 5000.

W. B.

VII.

*Suggestions for Revising and Re-organizing our existing Establishments for Raising Men for the Royal Navy.**July, 1845.*

OUR present system of opening merely occasional rendezvous for the entry of seamen, whenever they are wanted in larger numbers than usual, without having any fixed or permanent establishments for this purpose appears to me, under the existing circumstances of the country, to be a defect in our arrangements which ought to be immediately remedied, because it is obvious that in the event of any sudden alarm, or probability of war, our first preparations, and the equipment of our first squadrons, must depend entirely on the rapidity with which volunteers are collected for that purpose, by officers accustomed to this peculiar branch of service, and who may be depended on not only for energy and exertion, but for such a careful selection as will prevent the delay and disappointment so often experienced on these occasions, and which would be attended with such serious consequences on any emergency of the nature to which I have alluded.

It is equally certain that officers hastily selected and hurried off to parts of the country of which they have no local knowledge, and where they are themselves unknown, must inevitably act under very great disadvantages; and my recommendation therefore is that a permanent recruiting staff should be formed,

which dividing the whole of the United Kingdom into districts, and having head-quarters at all the large ports, may be constantly entering and forwarding seamen of the best classes, in such numbers, as the service may require under ordinary circumstances; but whose still more important duty it would be to ascertain and report the probable number of men they could raise by voluntary entry (and also by impressment,) whenever circumstances arose which might call for extraordinary exertions.

I should propose placing all these officers in communication with the inspecting commanders of the Coast Guard, from whom they ought to receive much important information and assistance on any emergency, and whose more exact and minute local knowledge would be found extremely valuable in perfecting an arrangement of this description, as well as a great saving of expense; for this is a service which they might very easily perform, without any risk of their attention being inconveniently withdrawn from their own more special duties; and I should imagine that the whole kingdom might, under present circumstances, be divided into eight or ten districts, having their respective head-quarters in London, Liverpool, Bristol, Leith, Glasgow, Hull, Newcastle, Cork, Yarmouth and Belfast, and that fit and proper officers might be found to superintend this service at a very moderate expense, into the details of which I purposely avoid entering, until the principle of the measure is approved, but which cannot during peace amount to much more than the difference between the half and full pay of the ten officers to be so employed.

We have lately had an opportunity of seeing that under our present arrangements it has taken nearly six months to man (very indifferently) six sail of the line, and I cannot but impute this great delay to our defective system, and the want of sufficient precautions against a sudden danger.

We ought to be aware that on the first apprehension or probability of war, we must without a moment's loss of time, despatch at least ten sail of the line to the Mediterranean to secure our superiority there, and also be prepared with at least an equal number at home, besides frigates and smaller vessels, and if our previous arrangements were matured and perfected during peace there would be no difficulty in being so prepared without alarm or confusion.

I should recommend that the officers employed on this service be most carefully selected. They should be either captains or commanders, and as far as can be ascertained of kind and conciliating tempers and manners; because I feel confident that if they conduct themselves with propriety and discretion in the execution of this duty, and show themselves on all occasions the friends and advisers of the seamen in their districts, they will soon acquire much influence and popularity amongst them, and be thus enabled to perform the service entrusted to their charge with much more usefulness and effect: and this remark applies peculiarly to the officer superintending the London district, who should place himself in constant communication with the Registrar of Seamen, as well as the Seamen's Home and Hospital, and keep himself

thoroughly informed of the general tone of their feelings and dispositions.

Nothing has more checked the entry of seamen during the last six months, than the manner of their conveyance from one port to another in small miserable vessels, crowded together like pigs, and without any decent accommodation or even shelter from weather. The whole crew of the *Caledonia* would have entered for the *Queen*, if they had not dreaded being conveyed to Chatham in tenders in which they must have remained on deck during the whole passage.

I therefore strongly urge substituting for these cutters, a sufficient number of steamers fitted for this service (or the conveyance of troops when required, by which means they will be doubly useful), and also that at the most distant points, such as the Clyde, Leith Roads and Cork, frigate troop-ships should be stationed to receive men, which would also be available for any other service, and add materially to our state of preparation in this particular branch, which is much too low at this moment, but on which, as I have already stated my ideas in a separate paper on the conveyance of troops, I will not enlarge at this moment beyond expressing my hopes that we shall not fritter away both our men and money by equipping ships of the *Athol* class for this purpose, when those like the *Resistance* and *Apollo* will carry double the number of troops at very nearly the same expense.

It has been suggested that the establishment of Sailor's Homes on the model of that now existing in London, might be useful at the ports where ships are

usually paid off; but although I believe no advantage would be derived from such a measure as regards the mere boarding or lodging of seamen, who in general, on being paid off, proceed soon afterwards to London, yet there is one part of Captain Elliot's system, which might, I think, be very usefully put into operation at Portsmouth, Devonport, &c., namely, the affording all possible assistance to seamen in the care and remittance of their money, and by this means protecting them from plunder and loss: and I would therefore propose that an officer should be stationed at each of these ports who might be considered by seamen as their friend and adviser on these occasions, as well as when they were in want of employment, and who would thus be able to impress on their minds a feeling of confidence in the Government by whom he was employed for their advantage and protection, and also be enabled by his constant communications with them, to retain in the service large numbers of those men whose training and discipline render them doubly valuable, but who, under our present system, are so often entirely lost to the Navy.

The officers in question would of course be always informed by the Admiralty when and where men would be wanted, and they might thus make prospective arrangements for all those seamen who were still desirous of remaining in the Navy, but who having just returned from foreign service wished, previously to engaging again, to pass some time in their native country.

This is a class of men who should be treated with

all possible kindness and consideration, and under the arrangement I have suggested care would naturally be taken not to send the same persons (against their inclination) a second time to any unhealthy climate, in which their health might have lately suffered, &c.

Having thus stated the principal features of the plan I am desirous of seeing carried into execution, as well as my arguments in favour of it, I will only add, that I contemplate no expense whatever beyond such a remuneration to the officers employed as might be considered advisable.

They should live on shore, and a small office and office-keeper, who should be an intelligent old petty-officer, would form their whole establishment; a boat when necessary, or any other assistance at the ports, would be furnished by order of the Commander-in-chief, with whom the officers stationed there would of course be in constant communication.

W. B.

VIII.

Admiralty, 3rd November, 1845.

DEAR LORD HADDINGTON,

I HAVE been postponing till your return, laying before you and my colleagues, the accompanying paper with respect to the promotion of Mates, and if you see no objection, it is my intention to take

an early opportunity of bringing the question under the consideration of the Board.

I am, dear Lord Haddington,
Yours very truly,

(Signed) W. BOWLES,
Rear Admiral,

Suggestions for the Promotion of Mates.

I feel it incumbent upon me to lay before my colleagues, without any further delay, some remarks which I have long been anxious to submit to them, on the subject of the Promotion of Mates; a question, in my opinion, of the highest importance as regards the future welfare of the Navy, and scarcely inferior to many of those other measures of preparation and arrangement, on which such large sums of money are now expending.

A glance over the List of Mates will shew that a very considerable portion of them have passed their examinations, after at least six years' service, as long since as the years 1838, 1839, and 1840, and have therefore already doubled the usual term of apprenticeship (if I may so call it) in their profession, thus disappointing and disgusting both the individuals themselves, and their relations and friends, who naturally feel all their prospects of advancement at any reasonable period at an end, when the first and lowest step in their career has not been attained, until they are fast approaching thirty years of age.

It appears to me, that by this reluctance to promote

these officers, we are fast drying up the sources from which the Navy can alone draw its future supplies, and when the smallness of the expense is compared with the magnitude of the object, I cannot think that any real difficulty opposes our relaxing the existing regulation, in such a manner, as to secure the early promotion of all the Mates of above five years standing, and in future, to accelerate materially that of the remainder, adopting as a principle, that it is not desirable to delay the promotion of any young man, who has served continuously, and creditably, beyond two years after passing his examination.

The great evil which we are now endeavouring to remedy, at a very heavy expense, arises from the advanced age of our superior officers; but by keeping the rising generation from obtaining even a Lieutenant's commission until a large proportion of them are towards thirty, we are perpetuating on posterity the very evil which we are endeavouring to remove from ourselves.

W. BOWLES.

Admiralty, November 3rd, 1845.

IX.

Suggestions for changing the Dress and Equipment of the Royal Marines.

December 31, 1845.

EVERY one who is acquainted with the internal arrangements of a Ship of War, and more especially

of the smaller classes, will bear testimony to the constant dirt and inconvenience on the lower deck, arising from the Marines cleaning and pipe-claying their white accoutrements; and it is also well known that scarlet is of all colours the most liable to spot and injure from the effects of salt water.

Under these circumstances, it is suggested, that if the uniform and appointments of the Marines were assimilated as nearly as may be to that of the Rifle Brigade, all these inconveniences would disappear, and the corps itself assume a more appropriate and military appearance, while other advantages would, as I anticipate, arise from this change of system of much greater importance; because, although I do not propose to arm the men with rifles, which are not adapted for sea service, I recommend their being very carefully instructed in Light Infantry exercise and manœuvres, by which they will be made much more intelligent and effective for the service they are most usually employed in, namely, the picking off the enemy's officers and men when ships are very closely engaged, and in covering the boats in desultory attacks on convoys, &c., along the coast, when a small body of well trained skirmishers, acting with rapidity and intelligence, and accustomed to withdraw without confusion at a moment's notice, will be found of the greatest value.

At present our Marines are chiefly instructed in parade and battalion movements, which are of little use to them in the services for which they are principally required, and they would therefore be found much

more effective for all general purposes, if the alteration which I suggest was adopted.

I am anxious however to explain most distinctly, that in proposing this change, I do not in the slightest degree contemplate any relaxation in the care and attention now so wisely bestowed on their instruction in artillery practice, being convinced that this is, after all, by far the most important consideration, and one which should never for a moment be lost sight of.

With respect to the colour of the proposed dress, I have no doubt that *blue* will at first occur to every one as the most appropriate, but experience proves that very dark green wears much better and longer; and whoever has had an opportunity of comparing the appearance of our own Rifle Corps with the French Chasseurs, who wear blue, will I think concur with me in this opinion.

W. B.

X.

Remarks on Lord Ellenborough's Memorandum of April 5th, 1846, on the Building, Repairing, and Altering of Ships in Her Majesty's Navy.

Admiralty, April 20, 1846.

I consider the subject to be discussed as one of the very highest importance, and a retrospect of our Naval Administration, since the peace of 1815, will prove what enormous sums of money have been expended in building, altering, and repairing ships,

which a more careful observation of the great increase, in size and armament, of those of other nations, would have convinced us were no longer capable of maintaining the honour of our flag, or our maritime superiority.

Our deficiency in ships of the line, and still more in frigates and smaller vessels, arises chiefly from this cause; the money expended in rebuilding or thoroughly repairing our old, and inferior ships, (*see Return No. 1*), as well as in constructing frigates capable of carrying only 18-pounders or carronades, (*see Return No. 2*), and small 10-gun brigs, would have been sufficient, if more judiciously applied, to keep the British navy on its proper footing, and obviated the necessity for those extraordinary exertions which we are now called upon to make.

It appears to me, that the first step to be taken on entering into the proposed discussion will be a careful revision of the whole navy, for the purpose of deciding, both on the classes of ships of which it shall hereafter consist, and to which our construction should be confined; and also, on those which may appear so manifestly inferior to those of other nations, that all expense in repairing them will be clearly injudicious.

With respect to the first point, it will I think appear advisable to diminish extremely the numberless varieties of which our navy has hitherto consisted, and which from their diversity of armament, equipment, and complement, become a constant source of expense and perplexity in our naval establishments.

One class of three-deckers, two of two-deckers, and two of frigates, carrying 50 and 28 guns, with brigs

mounting only *long* 32-pounders, would probably be considered amply sufficient, because the frigates of the *Castor* and *Pique* class, although armed with heavy guns, are still so inferior to the French and American in size and force, that notwithstanding they could not avoid or decline an engagement, the result might be very doubtful. We possess fortunately but few of this description, and have therefore only to discontinue their construction in future; and with respect to our smaller vessels, (brigs of 10 and 12 guns, &c.) even our present experience so distinctly points out that they will be superseded by steamers on every service for which they were formerly used, that I should very strongly recommend their entire discontinuance.

We have still so much to learn with respect to steam vessels, that I will not venture to offer any decided opinion upon the classes and dimensions to which it may be advisable to restrict ourselves in future; but the enormous expense of the *Terrible*, and others of that description, leads me to think that equal advantages may be obtained at a much smaller cost; because it is obvious that in the present state of maritime warfare, steam vessels will be rather auxiliaries than principals in naval engagements, and that arming them with broadside guns will only tempt to expose their most vulnerable points to the enemy's fire.

Having offered these observations with respect to our future constructions, I pass to the discussion of those points which have reference to "the altering and repairing" our ships of war; and considering the immense expense incurred under these heads, I cannot

too strongly urge a complete revision of our present system, being convinced that our greatest saving may be effected by a more careful adherence to those principles which prudence and economy so plainly point out, and which in fact consist chiefly in a determination not to repair any ships of an objectionable description; while with respect to those which are verging towards decay, but may still be available for a few years longer, although not worth any serious outlay, my opinion is, that only the cheapest and least valuable materials (such as fir, larch, or 2nd class oak) should be used upon them, without entering into any thorough or general repairs, and it is obvious that if we steadily pursued the system of wearing out these ships, while we reserve our newer and sounder ones for more serious emergencies, a very great economy would be effected, particularly with respect to those razéed ships, which having very old bottoms, will soon become greatly defective, and unfit for further service.

It is not sufficiently considered how fast ships in this state deteriorate by being paid off, and laid up in ordinary, without being attended to, for perhaps one or more years; whereas, if they were, on their arrival from a foreign station, immediately taken into dock, and refitted without loss of time for further service, a very great saving would be effected, not only by checking at once incipient defects and decay, but by preserving great quantities of stores and fittings of all descriptions, which when the ship is laid up become lost to the service. I doubt extremely whether we do

not lose much more than we gain by our excessive haste to pay off ships returning from foreign stations, which have been perhaps three or four years abroad, but are still in good condition, and requiring only a slight repair; and whether, under an improved arrangement, they might not be refitted in commission and sent to sea again in a state of order and efficiency far exceeding the newly commissioned ships, on our present system, many of which are three and four months fitting out, and consequently equally expensive. If this plan were adopted, we should no longer see fine well disciplined ships' companies disbanded and dispersed after a period of service barely sufficient to complete their training and organization, and although many changes of officers and men would necessarily take place, the discipline and arrangements of the ship would never be entirely broken up, a large proportion of the original crew would remain, or return, and the total destruction of every thing which cost so much time, trouble, and money, to establish and perfect, would be almost entirely avoided; the trim and proper stowage of the ship would be preserved, or handed over by the respective officers to their successors, and the principal defects of the hull being pointed out to the officers of the yard, much unnecessary expense and delay in examination would be avoided.

It should also be an invariable rule to order ships, returning from foreign stations, to the ports where they were last repaired, and where their defects and weak points can alone be accurately known. A very

great expense is often incurred in the repair of ships, by an unnecessarily rigid and minute examination, which would have been prevented by a previous knowledge of the nature and extent of the last repair, the quality of the timber used, &c.

In corroboration of my view on this subject, and of the economy of not paying off half worn ships, and commissioning others in lieu, taken from the ordinary, I will cite the following instance.

On Sir W. Parker's nomination to the command in the Mediterranean, and the decision that his Flag-Ship should be a three-decker, it was suggested that the Caledonia (then about to be paid off) should be selected for this service, being already fitted as a Flag-Ship, having been docked, refitted, and recoppered in the preceding spring, and in all respects complete for a three years station, and ready for sea without any additional expense.

It was however otherwise decided, and the Hibernia, an old ship which had been lying many years in ordinary, was preferred; on going into dock she was found defective, and an expense of £12,000 was incurred in repairing her, in addition to that of complete equipment of masts, yards, rigging, and sails, amounting to about £16,000, the whole of which might have been saved, by employing a ship already in commission, but, about to be paid off.

There is another very important point, which, during this discussion, I shall endeavour to impress strongly on the minds of my colleagues, and that is, the manner in which we accelerate the decay of our new

ships, by sending them to sea (and more especially to hot climates), the moment they are launched. I do not mean to assert this can always be avoided, but the *rule* should be to do so as far as possible; and in the case of the Raleigh and Constance for instance, and other experimental ships, whose qualities it is desirable to ascertain without delay, I should recommend, that as soon as they have been sufficiently tried, they should be carefully laid up again, and half worn ships (of which we have but too many) substituted for foreign service.

Our whole Navy will become *half worn* in a very few years, if during peace we do not keep this consideration more carefully in view.

We are also not sufficiently aware of the large sums of money expended annually in minute and fanciful alterations, as well as from a too ready acquiescence in the schemes and propositions of needy and plausible projectors. The failure of the Janus, after an outlay of £40,000, will I trust warn us again following the speculations of individuals to be tried at the public expense; and when I mention that the internal fittings of all the advanced ships have been altered three times during the last three years, at an expense of about £10,000, I shall, I think, sufficiently prove the necessity for more consideration and economy in future.

Those who like myself recollect the extensive and costly alteration of the sterns of almost the whole Navy, when Sir R. Seppings first brought forward his plans,

which have since been superseded at almost an equal expense by later improvements (a recent alteration of the *Trafalgar* [a *new ship*] cost £17,000,) will agree with me in thinking, that any general change of this description, involving so large an outlay, should be very cautiously and gradually undertaken, and that nothing short of some most decided and important advantage, should be considered sufficient to justify expensive alterations of this description, in ships already completed.

I fully concur with Lord Ellenborough in thinking that no ship should be ordered to be built without full and careful consideration; and though I trust there is now no danger of our Naval Architecture relapsing into its former state of discreditable inferiority, yet no pains can be too great, or more wisely bestowed, than those which are directed towards its constant and progressive improvement. This object, however, can only be fully secured by a long and patient succession of trials and experiments, under officers in whom full confidence may be placed, and who, at the conclusion of five or six months exercise, could not have failed to have formed a competent judgment on the respective merits of the ships on which they would be directed to report.

We shall soon have five or six frigates built by as many different constructors, of considerable science and reputation, and it will be very unfortunate if amongst these varieties of form, and arrangement of weights, we cannot effect material improvements in

our Naval Architecture, and emancipate ourselves from that system of servile imitation of which so remarkable an instance may at this time be seen at Devonport, where in an 80-gun ship now building (the Sans Pareil) we are copying all the defects of the French system of fifty years ago, and particularly the "tumble home" upper works, by which so much space is lost on the main and quarter decks, as well as spread for the lower rigging, and consequently support for the masts.

A deep sense of the importance of the subject has led me to extend these observations far beyond my original intentions, but I have long been anxiously desirous of a proper opportunity of placing on record my opinions on these subjects, feeling that in the eyes of the public, as well as of my own profession, I must expect to bear my full share of responsibility, and that it is therefore incumbent on me to point out, without reserve, those defects which have long existed, but which I think may be speedily corrected, in our Naval Administration.

I will only further add, that if the intentions and wishes of the Board on this subject were communicated to the Surveyor of the Navy, and the Superintendents of the Dock Yards, their greater and more exact practical knowledge and experience will, I am persuaded, enable them to afford many valuable suggestions and recommendations, which being, after due consideration, embodied in the shape of additional Instructions and Regulations, will, it may reasonably

be hoped, place all our arrangements with respect to the building, repairing, and altering our ships of war on such a settled system, as to ensure the steady application of all our resources and energies in the right direction, and combine great efficiency with a very considerable reduction of our expenditure.

W. B.

No. I.—Extracts from Records in the Department of the Surveyor of the Navy, at Somerset House, of the cost of repairs done to various 74 Gun Ships since the year 1815.

BY CONTRACT.

Guns.	Name.	BUILT.			REPAIRED.			
		Where.	When.	Expense.	When.	Expense.		
78	Achille .	Gravesend . .	1798	£38,450	1805	£38,271		
				Articles supplied from Dock Yard not included .		1814	18,156	
		Fitting	for sea.	8,424	1823	53,929		
				46,874	1841	16,393		
						126,749		
74	Eagle . .	Northfleet . .	1804	37,760	1810	3,123		
				Articles supplied from Dock Yard not included .		1816	59,430	
		Fitted	for sea.	9,098	1823	6,435		
				46,858	1831	17,132		
						4,800		
						90,920		
74	Ajax . .	River Thames .	1809	57,383	1816	8,918		
				Fitting	for sea.	8,544	1829	58,988
						65,927		67,906
74	Barham .	River Thames .	1811	57,949	1815	19,398		
				Fitted	for sea.	8,417	1826 & cut down.	} 29,436
						66,366	1831	
							1840	3,310
								63,409
74	Edinburgh	River Thames .	1811	57,006	1820	53,865		
				Fitted	for sea.	9,161	1830	7,967
						66,167	to 1841	8,609
								70,441
74	Dublin .	River Thames .	1812	57,372	1814	5,277		
				Fitted	for sea.	9,347	1826 & cut down.	} 47,735
						66,719	1835	
							1841	13,158
								76,145
74	Benbow .	River Thames .	1813	57,411	1820	48,252		
				Fitted	for sea.	10,659	1843	11,416

IN DOCK YARDS.

Guns.	Name.	BUILT.			REPAIRED.						
		Where.	When.	Expense.	When.	Expense.					
76	Warspite .	Chatham . . Fitted	1807 for sea.	£.	1818 1829 1840 & cut down.	£.					
				46,855		58,172					
				8,464		13,394					
				55,319		20,037					
<hr/>						91,603					
74	Black Prince	Woolwich . . Not	1816 at sea.	69,329	1825 1830	6,152 2,229					
				<hr/>						8,381	
74	Blenheim .	Deptford . . Fitted	1813 for sea.	56,072	1824 1831 to 1840	44,232 7,899 6,862					
				3,177	<hr/>						
				59,249	<hr/>						58,993
74	Vindictive .	Portsmouth . Not	1813 at sea.	48,772	1828 1832 & cut down. 1842	not known 32,400 8,025					
				<hr/>							
				<hr/>						40,425	
				<hr/>							
74	Bellisle .	Pembroke . . Fitted	1819 for sea.	50,731	1833 1836 1841	8,052 4,759 4,483					
				3,846	<hr/>						
				54,577	<hr/>						17,294
				<hr/>							
74	Agincourt .	Plymouth . . Not	1817 at sea.	72,857	1824 1836 1842	2,491 14,434 3,459					
				<hr/>							
				<hr/>						20,384	
				<hr/>							
74	Hercules .	Chatham . . Not	1815 at sea.	65,411	1823 1834 1836 to 1843	7,059 7,378 5,273 7,280					
				<hr/>							
				<hr/>							
				<hr/>						26,990	
				<hr/>							

XI.

Speech of Admiral Bowles (M.P. for Launceston), in the House of Commons, on the "Navy Estimates," on Wednesday, August 9th, 1848.

Extracted from Hansard's Parliamentary Debates.

ADMIRAL BOWLES :—Sir, the honourable Member for the West Riding has addressed the first part of his speech so particularly to me, that although he was sufficiently discursive towards the conclusion, and wandered into various foreign topics, it would be disrespectful towards the House, and not courteous to the honourable Gentleman himself, if I did not say a few words in reply. The great error into which he, and all the school to which he belongs, always fall in discussing these questions, is, that from an apparent incapacity to comprehend the immense national interests and objects at stake, they argue as if the matter was merely pecuniary—an affair of pounds, shillings, and pence—and totally lose sight of the higher objects involved in it. The honourable Gentleman brings forward his *ad captandum* illustrations, to shew how many quarters of wheat may be bought, or how many ten-pound houses built, with the money which our Navy costs us; but he forgets that even the blessings of food and dwellings will go but a small way towards human happiness, if they are unaccompanied by a sense of protection for life, and security for property. For the

sake of a passing smile in the course of his speech, he has quoted garbled extracts from evidence not yet published, to represent an officer of high rank and character, as entertaining exaggerated and groundless apprehensions, and suggesting unnecessary precautions ; but I assert, from my own knowledge, that the dangers in question were not imaginary but real—that if war had suddenly broken out in 1844, we were by no means prepared for it, and this not from the fault of the then existing Government, but from the injudicious and overstrained economy of their predecessors in office, who had not been sufficiently alive to the extraordinary efforts making at that time by France for the increase of their navy—a steam navy more especially—which might outnumber ours on any sudden emergency. Any one would suppose, while listening to the honourable Member, that all the great exertions made during the administration of the right honourable Baronet the Member for Tamworth to increase our own force, were extravagant and unnecessary fancies ; but he forgets that we were driven to them by the conduct to which I have alluded ; and when he quotes Sir R. Peel's wise and statesmanlike entreaties to Foreign Powers to abstain from warlike preparations, he must surely be aware that all these observations were especially addressed to France. And how was his appeal answered ? Why it appeared as if the Government, the Chambers, and the nation were rivalling each other in hostile feelings and demonstrations, and pressing forward more eagerly those great naval preparations so evidently directed against

us, and which rendered indispensable corresponding efforts on our part. I trust that circumstances have now changed, and better feelings have arisen, but I am anxious to shew how completely the honourable Member has misrepresented all the facts for the purpose of suiting them to his own argument. Sir, after the very satisfactory statement of the Secretary of the Admiralty, by which we are informed that none of the more important suggestions of the Select Committee are to be adopted by Her Majesty's Government, I shall abstain from those lengthened remarks upon them which would otherwise have been necessary, observing only that the report has been drawn up with great care and labour by the Noble Chairman, and that it will be found very useful as a general summary of the practice of the department, if the Government should continue to divest itself of its responsibility, and again to commit the revision of the Navy estimates to a Committee of this House.

The recommendations to which I propose to advert are only the most important ones, and I will take that with respect to Keyham first, because it far exceeds the remainder in magnitude; and, if I have the good fortune to convince the House that I am right on this point, I shall give them very little more trouble with respect to the remainder. Sir, I did not imagine, until I attended this Committee, that a doubt could arise in the mind of any reflecting individual as to the obvious necessity of preparing in due time for the repairs and equipment of that steam navy which circumstances beyond our own control, and to which I

ened not now more particularly allude, had obliged us to create. Our Naval Arsenals, complete as they generally are, for the purposes of former times, were, with the exception of one in the Thames (Woolwich), unprovided with the means for repairing the defects or injuries of a single steamer, and it was clear that all our efforts would have been thrown away except our two great Western Arsenals—Portsmouth and Devonport—were made available for this purpose. The former is happily nearly complete, and beyond the reach of the Committee, but no efforts were left untried to overthrow or retard the completion of the latter, and although the evidence of almost every witness bore the strongest testimony to its extreme importance, and the impossibility during war of conducting naval operations on the coast of France, Ireland, and the Bay of Biscay, without a sufficient establishment at Plymouth for the immediate refitment and repair of our steam navy, it was obviously impossible to convince those whose minds were apparently previously thoroughly made up on the subject of this self-evident truth. It was in vain urged that France had already made these preparations. That at Cherbourg, Brest, Indret, and Rochefort, all was complete. Nothing could convince a certain number of the Committee, and it will be seen by the proceedings that two honourable Members actually voted for the immediate stoppage of these great and most important works! Sir, I have already said that I impugn no man's motives. I trust they are upright and honourable—but this I will fearlessly assert, that the worst enemy of his country

could not have devised a scheme more calculated to injure our naval power, and to cripple our means both offensive and defensive.

Sir, with respect to the recommendation for confining the number of men actually employed strictly within the limits of that annually voted by Parliament, it sounds, I acknowledge, pausable. I know it was an old hobby of the right hon. Member for Ripon, but it has one great objection—it is impracticable. In the vast and complicated affairs, foreign and domestic, of this mighty empire, something will every year occur at home or abroad to create alarm and uneasiness—to impede the regularity of reliefs, and, in short, to derange that perfect accuracy of management on which this suggestion depends. With respect to the recommendation of the Committee to annul the whole of those regulations on the faith of which a large measure of retirement and gradual promotion was granted to flag officers only a year and a half ago, its injustice is, I trust, so evident to Her Majesty's Government that I will not trouble the House with any further remarks upon it, and I will only in conclusion detain the House a very few minutes with some observations on the line of conduct which might, without impairing the efficiency, secure real and solid economy in our naval administration. It has been more than insinuated, in the course of this debate, that naval officers are reckless of expense—that they are regardless of economy, and only desirous of maintaining large and unnecessary establishments. Sir, I deny all these accusations. I assert that we

are most anxious to combine efficiency with economy in its true and legitimate sense; but real economy, Sir, is that which produces equal results at a smaller cost, while parsimony and injudicious saving only render inevitable a much larger outlay hereafter.

My gallant Friends opposite will allow me to remind them how much money may be saved by a constant and careful control over the large sums annually expended in our Dockyards, in building, repairing, and altering ships; and how much consideration is necessary to guard against any injudicious expenses under these heads. I would venture to suggest to them a much more detailed and serious examination of all these questions before the whole Board of Admiralty than has ever hitherto prevailed, and to recommend that, as it is now finally determined that the Surveyor of the Navy shall in future be an officer of rank and distinction in the service, he should no longer be considered as a mere subordinate, but be raised to a seat at the Board, and thus enabled to state and support his own opinions and ideas with more freedom and effect. I am convinced that nothing would conduce more towards real economy than the adoption of this plan.

XII.

Speech of Admiral Wm. Bowles, C.B., (M.P. for Launceston.) in the House of Commons, Thursday, June 12, 1851, on the Navy Estimates.

EXTRACTED FROM HANSARD'S PARLIAMENTARY DEBATES.

ADMIRAL BOWLES said :—The Hon. Gentleman who has just spoken (Mr. MacGregor) has certainly given us a most elaborate account of the strength of foreign navies, although if it is as inaccurate as that which he has favoured us with our own, it is of very little value in a discussion of this nature. He ought, however, to have recollected that we have within our memories seen all these Powers coalesced in hostility against us ; and let me rather, therefore, endeavour on the present occasion to prevail on the Committee to consider this great question as becomes men who are charged with a most important duty, and the decision of questions on which our national honour and our national safety equally depend. The subject was argued the other night under two different suppositions. The first, that as war was in future not only highly improbable, but almost impossible, all our preparations against such a contingency were so many absurd and unjustifiable expenses—while another party, not venturing to go quite this length, only contend that our establishments are needlessly large and extravagant, and entirely disproportioned to any danger we can reasonably apprehend. It would be a

waste of time to argue against the first class of objectors. I wish I could call them harmless and amiable visionaries ; but I grieve to say that the public peace is more likely to be endangered by their mischievous disposition to interfere in the domestic affairs of other countries, and to make common cause with a revolutionary party, wherever it is to be found, than by any other peril now discernible in the political horizon. But I will now, Sir, endeavour to deal with more tangible realities ; and in reply to the objectors against the magnitude of our preparations, I must ask whether they have ever read or heard of the commencement of the war with France, in 1793, when, after having in the preceding year reduced all our establishments to the lowest scale under the mistaken impression that war with that country was impossible, from their internal distractions and embarrassed finances, we suddenly found ourselves engaged in hostilities with an enemy much better prepared than ourselves ; and it was not until after a year's exertion, and an enormous loss of merchant ships and men (the French prisons being full of our best seamen), that with seventy-eight sail of the line in commission we were able to protect tolerably our coasts, Colonies, and commerce. Sir, it is only by reviewing past events and past dangers that we can form any safe and rational conjectures with respect to the future ; and although I have seen too much of the miseries and calamities of war not to deprecate its recurrence from the very bottom of my heart, I cannot persuade myself that the present moment is one in which we should be justified in relaxing our prepara-

tions, or abandoning our defensive position. Let the Committee only cast its eyes at the events now occurring at the Cape, from whence in a fit of parsimonious economy we withdrew last year too large a proportion of its garrison, informing the inhabitants at the same time that they must in future be prepared to defend themselves; and having thus tempted the Kaffirs to attempt another invasion, we are now hurrying out with breathless haste reinforcements—which must, after all, arrive too late to prevent dreadful losses and heavy expenses—and this we call economy! Let us, therefore, Sir, examine calmly and carefully what our establishments really are, and what proportion they bear to those of other maritime Powers. France may be considered as possessing about 50 ships of the line, 57 frigates and 114 steamers. Russia has about an equal number of ships of the line, but is inferior to France in frigates and steamers; while the United States have 11 ships of the line, 15 frigates, and an increasing number of armed steamers, forming an aggregate force of about 100 sail of the line, with a full proportion of smaller vessels of every description. I am very far from wishing to exaggerate, or anticipate danger unnecessarily; but we cannot conceal from ourselves that there exists, both in Europe and America, a strong party, envious of our prosperity, jealous of our naval strength, and but too ready to avail themselves of any favourable opportunity to injure the one, or impair the other. It is, therefore, the duty of this House to maintain in their full and undiminished efficiency those defensive preparations which in all

former times have been found not more than sufficient for our protection. To weigh well the possibility of future coalition against us; to reflect that our actual amount of force is very much below our former establishments; and that in real truth France was stimulated to the extraordinary exertions made during King Louis Philippe's reign, not by any preparations of ours, but by the parsimony and apathy observable in our naval administrations, from the effects of which we have even now scarcely recovered. We were informed officially the other night that our whole strength of ships of the line had diminished to 60; and although the hon. Member for the West Riding imagines that no fleet of thirty sail of the line will ever be again assembled, I can tell him that three fleets of this force will be necessary to oppose any such coalition as that which may very possibly be formed against us. Our whole force in activity is barely sufficient for the various services on which it is employed abroad; and the reduction of 3000 seamen two years ago has, as I then predicted, broken up our home squadron, and deprived us almost entirely of those means of instruction and exercise, as well as of defence on any sudden emergency, which Sir Robert Peel had most wisely provided. If the disposition of the French Government had been at all doubtful or suspicious when they brought a strong squadron to Cherbourg last year, we had no equal force at hand for our defence or protection, and it very rarely occurs that we have even a single ship at home fully manned and disciplined. I hope, Sir, I may have shewn that our force afloat

is not too large ; and it therefore only remains for me to offer a few observations on our dock-yards, on which it has of late become the fashion to lavish every opprobrious and disparaging epithet, without the slightest proof of misconduct or mismanagement. I heard an hon. Member the other day speaking of "the scandalous malversation in our arsenals," as a fact universally admitted ; and if I had asked him for an explanation, he would probably have referred me to those newspapers which almost daily teem with unjust and injurious accusations against a class of meritorious and hardworking public servants, whose zeal and exertions deserve better treatment at the hands of their countrymen. If anything to their disadvantage could have been elicited, it would have been infallibly discovered by the Committee on the Navy Estimates in 1848, who were sufficiently inclined to look with suspicion, at least, if not with disfavour, on our naval establishments, and readily received all accusations against them. But, Sir, it must be recollected that our dock-yards are under the immediate supervision of the Admiralty, acting in all cases on their express directions ; and therefore if mistakes are made, or unnecessary expense incurred, it would I think be only fair to consider whether the blame may not rest elsewhere. Now, I am very far from saying that no mistakes have been made, or no expenses unnecessarily incurred ; but I am inclined to impute them rather to the too political character of our naval administration than to any other cause. We all know that our Admiralty changes with every Government, and fre-

quently oftener—to take the last ten years for an example. We have had five different First Lords during that period, and the entire Board has been changed three times, besides many partial removals; and giving, as I sincerely do, full credit to all these individuals for the most anxious desire to fulfil faithfully a laborious and difficult duty, it is impossible not to see that these too frequent changes inevitably lead to much diversity of system, many expensive alterations, much doubt and hesitation in the prosecution of important works, and many other minor inconveniences which may be easily understood, but which I will not weary the House by recapitulating.

It is to our system, therefore, and not to individuals, that blame is to be imputed; and I have not the least doubt that if a certain proportion of the members of the Board of Admiralty held their places during pleasure, and were ineligible for seats in Parliament, the evils which are now felt from these too frequent changes would be very materially diminished; and I take this opportunity of repeating a suggestion which I offered two years ago, with respect to the Surveyor of the Navy, whose duties are of the highest importance, and who, instead of being placed, as at present, under the direction of one of the Junior Lords of the Admiralty, and therefore liable (at least occasionally) to be thwarted and obstructed in the execution of his office, should, in my opinion, have a seat at the Board, and form a part of that permanent establishment which I am now recommending. It was to remedy similar evils arising from the same

cause that Sir Robert Peel wisely determined to appoint a naval officer (Sir T. Hastings) carefully selected for that purpose, as a permanent member of the Ordnance Board; and the success of the experiment fully justifies my recommendation for its extension. Our heaviest expenses are incurred in the construction and repairs of our navy; and it is therefore of the highest importance to guard against those hasty or injudicious alterations which too often mark the commencement of a new Naval Administration, by providing a certain proportion of experienced and well-informed persons, who may be able to explain to their new (and perhaps too eager colleagues) the actual state of affairs, before any important change is commenced, or some plausible projectors are allowed to try their experiments at the public expense. It is impossible, in discussing this important subject, not to contrast our Military with our Naval Administration, and to inquire why these two great services should be conducted on such totally different principles. The one wholly irrespective (as an armed force should always be) of party or politics, and directed by the ablest professional men; while the other is exposed to every political vicissitude, liable to all those variations of opinion and conduct inseparable from frequent changes in its administrators, and presided over by any nobleman or gentleman who may happen to draw this prize in the lottery of politics, without the least previous knowledge or experience of naval affairs. I confess, Sir, my wonder has always been, not that mistakes are frequently made, and dissatisfaction ex-

cited, but that a great department administered on such principles should have been so satisfactorily conducted as it has generally been ; but this is no argument against improving our system, and guarding against those evils which have hitherto existed. Sir, I dare say we shall hear from my hon. Friend the Member for Montrose, or some of those gentlemen who think with him on these matters, a severe attack on the vast accumulation of stores in our arsenals, and recommendations to purchase these articles when they are wanted, instead of providing them beforehand. But the House will recollect that timber, hemp, and canvas cannot be obtained at a moment's notice. That oak, in particular, requires at least three years' seasoning before it can be used without great danger of that rapid decay of which during the late war we had such lamentable proofs. That ships must have sails prepared for immediate use, as well as other parts of their equipment ; and with respect to hemp, as none is grown in this country, and our whole supply is derived from the Baltic, it may be sufficient to mention what actually occurred only last year, when all the contractors for this article (of whom there were several) having failed in their supplies, only 200 tons out of 1000 could be procured in the whole London market to make up the deficiency. Perhaps the House may not be aware that France grows a sufficient quantity of hemp for all naval purposes, and is, therefore, no longer dependent on a foreign supply. There is another misstatement which has been very generally circulated, but which I should hardly have thought worth noticing

if I had not observed that it has produced some impression on persons unacquainted with naval affairs. I allude to an inquiry as to what has become of all the ships in our possession in 1815, and why any new ones are now necessary? To this question the short answer is, that the average duration of a ship (even with a repair equal to half its value) does not much exceed twenty-five years; and, besides this, the changes which have been introduced, both in the size and armaments of ships of war since that period, would have rendered our navy very inferior to those of all other nations, if, from a mistaken economy, we had endeavoured to patch up our old ships instead of building new ones. Sir, I have detained the Committee longer than I intended; but I was anxious, while I endeavoured to contradict statements calculated to excite unfounded discontent and uneasiness, to offer some suggestions, which I think, if attended to, might place our Naval Administration on a more satisfactory footing. It has been the evident object of many newspaper articles to represent our navy as in the worst possible state; and if these assertions are allowed to remain uncontradicted there is very great danger of their obtaining at least a partial belief, and that the nation, formerly so proud of its fleets, and so jealous of their honour and superiority, may become disgusted and impatient of an expense which, it is led to believe, produces such unsatisfactory results. It is, therefore, with very sincere pleasure, I state my opinion, that the British Navy, speaking of it as a whole, was never in a better state of efficiency and preparation; and, with

respect to that part of it which is kept in commission and activity, especially our two squadrons in the Mediterranean and at Lisbon, all accounts concur in representing them in the highest state of order and discipline, and that they only require more frequent and careful exercise at sea. The superiority of our new ships is becoming every year more apparent; and I cannot here avoid expressing the gratitude so justly due to Sir W. Symonds, from his country as well as his profession, for the great improvements he was the first to introduce into our naval architecture, amidst a storm of obloquy and opposition rarely equalled in our naval annals. Sir, I will conclude by expressing my earnest hope that we may consider this important subject calmly and carefully, and that we may not on this occasion, exhibit to the country a scene too often witnessed in private life, namely, that of a testy old gentleman, very rich, and very proud of an establishment which he expects to have kept up in the most perfect state of order and efficiency, but unfortunately afflicted with chronic fits of imaginary poverty; and when his wife, or his housekeeper, or his steward, comes to him for money to pay his weekly or monthly bills, he breaks out into the most absurd invectives against the waste and extravagance of his servants, and the carelessness or dishonesty of those who manage his affairs, and by thus disgusting or discouraging those who are serving him faithfully and honestly, runs a very great risk of falling into the hands of rogues, whose first object will naturally be to deceive and plunder him.

ADMIRAL BOWLES, in a subsequent part of the debate, replying to Mr. Trelawny, who objected to the grant for the new works at Keyham, said, that it was of the utmost importance that this addition to the dockyard at Devonport should be completed with as little delay as possible. That, even with all the exertions which could be used, it would be at least two years before a single steam-vessel can be repaired at that yard; and when it was considered that this was the arsenal to which ships disabled in the Bay of Biscay, as well as on the coast of France and Ireland, would naturally resort for safety and repairs, it might easily be imagined what difficulties and delays would arise, if, at the commencement of war or armament, we found our frontier dockyard wholly unprovided with the means of speedily refitting a most important part of our Navy, and destitute of those preparations and appliances with which all the French arsenals on the opposite coast are now so amply furnished. It was therefore, in his opinion, the duty of Her Majesty's Government to proceed with these works with the least possible delay; and he had heard with much regret some expressions from the First Lord of the Admiralty which induced him to fear that that right hon. Gentleman was not sufficiently aware of the vital importance of this subject, or the fatal consequences which might arise from disregarding it. The Committee of 1848 was, in his opinion, deeply responsible to the nation for the erroneous opinions expressed in their report on this question—a report made in direct opposition to the whole of the evidence, and drawn up

by Gentlemen whose strong preconceived prejudices, and previous sentiments, rendered them very incompetent judges of a great professional subject of this description.

XIII.

LETTER TO ADMIRAL DUNDAS
ON STEAM GUARD SHIPS.

London, August 27, 1847.

MY DEAR DUNDAS,

I HAVE lately ascertained with regret as well as alarm that the fitting of the Steam Guard ships for the defence of our naval arsenals is in a great degree suspended, and entertaining as I do a very strong and decided opinion on the extreme importance of this measure, and the fatal consequences which may arise from any disregard of those precautions which were adopted by the late Government after very careful consideration, and a full examination of all the localities by the most experienced officers, I cannot refrain from communicating to you the following observations on the subject.

There was every reason to believe that if hostilities had commenced (as was at one moment by no means improbable) in the autumn of 1844, the French Government intended to concentrate its entire steam navy

suddenly at Cherbourg, and having embarked there a sufficient land force, to have attempted by rapid attacks, the destruction of some of our naval arsenals; and we were at that time so completely unprepared, both by land and sea, that I can have no hesitation in saying that their success would have been extremely probable.

A strong sense of the danger from which we most fortunately escaped, induced the Government to reconsider shortly afterwards our whole defensive system; and you are of course fully aware of the proceedings and report of the Commission appointed for this purpose, and particularly of their recommendation of that measure to which I am now referring, namely, the fitting, with all practicable expedition, a sufficient number of old ships of the line and frigates, heavily armed, lightly rigged, and propelled by steam as well as sails, for the especial purpose of having always in perfect readiness at each port a local force so formidable, so moveable under all ordinary circumstances of wind and weather, and so easily manned and managed from our resources on the spot, that any attack, however sudden, might be met with perfect confidence, because no fleet of steam vessels would venture to land troops, or to continue any offensive operation, in the presence of a squadron so much superior in force, and receiving hourly reinforcements.

I will not unnecessarily lengthen this letter by any attempt to shew how peculiarly applicable this mode of defence is to all our principal arsenals, as well as to those parts of the adjoining coasts and landing places,

which would most naturally be selected by an invading enemy.

Sheerness, the entrance of the Thames, the Downs, the coast east and west of Portsmouth including the Isle of Wight, the immediate vicinity of Portsmouth, from the Yealm to Looe, and Milford Haven, are all easily susceptible of defence in this way, although far too extensive for any regular fortifications; and I need not tell you that when the late Government quitted office all the arrangements for completing this great measure were in such a state of forwardness, that these ships ought to have been ready for service this year.

I have heard no valid objection ever urged against the *principle* of the plan in question, and the few criticisms on its details are I think very easily answered.

It has been said these ships will be slower than other steamers; but if the Blenheim has gone seven knots under steam, and the Amphion more, it is quite clear that their speed will be sufficient for all practical purposes *now*, and improvements may be made hereafter.

It is also objected, I hear, that they stow but little water or provisions; but they are intended for *most especial home service*, and one object always kept in view was to prevent any future Administration from diverting them from their contemplated purpose, and thus again exposing the country to the danger from which we were endeavouring to guard it.

The smallness of their masts, &c. has been, I find, censured, but the great object is to secure their being easily and safely managed by such crews as could be

hastily got together on any sudden emergency, and this would be entirely defeated if they were heavily rigged.

I am fully convinced that whenever any rupture takes place between France and ourselves, the Government of that country will endeavour to strike some sudden and severe blow, wherever we may appear to them most vulnerable, and awful will be the responsibility of those who may then be found guilty of any negligence or want of preparation.

Let me, therefore, very earnestly entreat you to reconsider this subject most seriously—to believe that your predecessors in office did not adopt the suggestions of the Commission rashly or inconsiderately, and that all delays in a matter of this vital importance are doubly dangerous.

Believe me, ever truly yours,

WM. BOWLES.

“Blenheim,” Sheerness, 25th October, 1847.

DEAR ADMIRAL,

The few enclosed particulars of the result of the trial of the first Steam Guard-ship I considered would be of interest to you, and have therefore troubled you with them. And believe me,

Dear Admiral,

Your faithful and obedient Servant,

HORATIO P. AUSTIN.

Rear-Admiral W. Bowles, C.B.

&c. &c. &c.

Particulars of the performance and capabilities of the "Blenheim," as shown during a local cruize between the 8th and 15th of October, 1847, when fully equipped and stored for coast service.

Total distance run, 222 miles.

Number of hours under steam, $50\frac{3}{4}$.

The total expenditure of fuel, by the most careful measurement, has been $84\frac{1}{2}$ tons, being at the rate of 36 tons per 24 hours.

The maximum speed obtained with engines alone, in a royal breeze, free, the engines making 42 strokes, and the barometer $25\frac{1}{2}$, was $6\frac{5}{10}$ knots.

The maximum speed obtained with engines alone in a moderate royal breeze, ahead, $5\frac{5}{10}$ knots.

The maximum speed obtained with engines and sail, in a single reef topsail and topgallant breeze, abeam, the engines making 46 strokes and the barometer $24\frac{1}{2}$, $8\frac{5}{10}$ knots.

The maximum speed obtained with sail alone, under the same circumstances, $4\frac{5}{10}$ knots.

The maximum speed obtained with engines and fore and aft sails, in a moderate royal breeze, close-hauled, $6\frac{6}{10}$ knots.

The maximum speed obtained with fore and aft sails alone, under the same circumstances, $1\frac{8}{10}$ knots.

The mean time occupied turning a whole circle ahead, $7\frac{1}{2}$ minutes.

Ditto, astern, 9 minutes.

In reversing engines from full speed, $1\frac{3}{4}$ minutes.

Time elapsed from engines being ordered to be reversed, until ship went astern, 2 minutes.

Time occupied in raising steam from cold fresh water, temperature 56°, 1h. 16m.

From cold salt ditto, temperature 62°, 1h. 15m.

In raising steam when fires were banked up :

From salt water, temperature 140°, 45 minutes.

In raising propeller :

Maximum, 25 minutes.

Minimum, 15 ditto.

In lowering propeller :

Maximum, 8 minutes.

Minimum, 5½ ditto.

Time occupied in lowering funnel, 10½ minutes.

In raising ditto, 8 minutes.

XIV.

LISBON SQUADRON.

A RETURN of the Number of Days the SQUADRON at LISBON, under the Command of Commodore MARTIN, has been at SEA, for the purposes of Instruction and Exercise in Naval Evolutions, during the Years 1850 and 1851, distinguishing the Two Years, and the names of the SHIPS so exercised.

COMMODORE MARTIN took command of the Squadron at Lisbon on the 24th January, 1850. With respect to the remainder of that Year, the Squadron were at Sea together 98 days, although some of the Ships were occasionally detached for Experimental Trials, to communicate with Lisbon, and for other duties. The bulk of the Squadron were together.

SHIPS' NAMES.	Number of Days attached to the Squadron in 1850.	Number of Days at Sea in				Number of Days attached to the Squadron in 1851.
		1850.		1851.		
		With the Squadron.	Without the Squadron.	With the Squadron.	Without the Squadron.	
Prince Regent . . .	341	98	*	13	15	221
Hogue	146	33	9	185
Indefatigable. . .	119	45	..	22	10	87
Leander	341	9	..	32	18	365
Phaeton	250	71	..	22	21	209
Arethusa	280	66	..	35	37	365
Arrogant	327	88	25	6	20	218
Thetis	141	45	—	—	—	—
Encounter	308	47	48	..	28	251
Conflict	171	33	9	—	—	—
Dauntless	61	22	..	22	16	247
Retribution	18	19	..	78
Terrible	83	33	—	—	—	—

Most of the Ships that were at sea without the Squadron are not present; I have therefore no means of ascertaining the perfect correctness of the figures in the columns marked *, although I believe them to be correct.

W. F. MARTIN, *Commodore.*



AN ESSAY

ON

NAVAL OPERATIONS.

BY

REAR-ADMIRAL BOWLES, C.B.

1

INTRODUCTION.

It has not been without much doubt and hesitation that I have resolved on laying this little Essay on Naval Operations before my brother Officers.

I am well aware that there are no particular circumstances in my own professional career, which entitle my opinions on this subject to any special regard or attention; and if I had presumed to bring forward any new notions or theories of my own, I should have entertained very faint hopes of a favourable reception: but my sole object has been to attract the notice of the rising generation to those principles, those maxims, and that line of conduct which can only be learned and drawn from a careful and diligent study of the history and achievements of the greatest naval commander this country has ever produced, and to prove that, in every instance, his glorious and unprecedented successes are to be attributed not to mere daring courage, and enterprise, but to the skill and science with which all his operations were conducted, and every probable occurrence foreseen and provided for.

Thirty years of peace have silently swept away almost the whole generation of those who held any superior commands during the late war, and that to which I

myself belong is so rapidly following, that it cannot be much longer relied on for active service.

I have therefore thought, that, in the absence (as far as I am aware) of any similiar publication, I might perform a useful service to my country and my profession, by endeavouring to fix the attention of those who will hereafter command our fleets, on those great principles of naval as well as military warfare, by a strict adherence to which alone, can confidence be commanded, and success secured. Although it appeared unnecessary in an Essay of this description, to dwell on those manœuvres and formations which more properly belong to the exercise and drill of a fleet, I am most anxious it should not be thought that I undervalue them, or that I am not fully aware of their importance. On the contrary, nobody can more earnestly urge the utmost attention to all those evolutions which a fleet must be prepared to perform with rapidity and precision in the presence of an enemy ; and these remarks apply not only to the change from line to column, and *vice versa*, but even more particularly to the more difficult manœuvre of tacking together, and afterwards correctly reforming the line of battle or sailing, at the shortest notice.

ESSAY.

THE long period already elapsed, during which little or no attention has been bestowed on naval evolutions or manœuvres, and scarcely a single squadron assembled to practise even the commonest exercises, appears to call for the most serious consideration of all those who are to serve in our fleets, and more especially of those who are likely to command them, and demands that while there is still time for reflection and discussion, some general principles should be laid down and agreed on as a basis on which a new and improved system of naval tactics may be formed.

It is to our negligence of this important consideration, and the discordant ideas which have formerly prevailed on the subject, that most of our indecisive and ill-fought actions at the commencement of hostilities may be attributed; and if we review our naval history during the period of the American war, when our fleets and those of the French were frequently opposed to each other, on nearly equal terms, nothing can be more lamentably remarkable than the want of skill with which our engagements were conducted, and the apparent absence of any fixed principle in the minds of our commanders.

Instead of keeping their ships closely arranged, and endeavouring by some sudden and unexpected manœuvre to attack and overwhelm a part of the enemy's force, whenever a favourable opportunity presented itself—(and such favourable opportunities did very frequently present themselves)—the practice seems to have been, to commence an engagement without any regard for regularity or arrangements for mutual support; and the natural consequences usually followed, namely, that a portion of the British fleet having been severely handled, and disabled before the rest could come up, the French contenting themselves with this advantage, increased their distance as the evening approached, and thus terminated an indecisive and inglorious action, by which our fleets were frequently so crippled and injured as to be obliged either to return into port to refit—thus abandoning the field of operations to the enemy—or to destroy those disabled ships which could neither be left behind nor brought off.

I will not on this occasion go into minute details; but every observant reader of our naval history during the period to which I refer, from 1778 to 1782, commencing with the first engagement between Keppell and D'Orvilliers, and following the most authentic accounts of the subsequent actions fought under the command of Rodney, Byron, Arbuthnot, Graves, Hughes, &c. cannot fail, I think, to consent to the correctness of the opinions I have advanced.

It was reserved for the brilliant and expanded mind of Nelson, "whose extraordinary genius inspired ideas superior to those of the common race of men," to

discover the applicability of military principles to naval operations—to form his fleet into columns of attack—to establish as fixed rules, that “*the order of sailing was to be the order of battle,*” and that “*the whole fleet was to act as one ship,*”—thus avoiding at the same time the two great errors of all his predecessors—endeavouring to engage the enemy in a long and unmanageable line, which often was not formed until after some hours of time had been lost, and which when formed, it was almost impossible to bring into action with any powerful or simultaneous effect—and producing, indeed rendering almost inevitable, those partial and isolated combats of single ships or divisions which usually terminated (as I have already remarked) in indecisive and inglorious engagements.

No one can, I think, fail to remark, that from the earliest period of Nelson’s career in command of a division (the action off Cape St. Vincent,) he never failed to perceive and seize the happy moment for attacking the enemy. If the fleet had (according to Sir John Jervis’s original intention) tacked in succession, after passing between the Spanish divisions, the latter would have reunited to leeward before our manœuvre was performed; and it was only by the instant wearing of the “*Captain*” and “*Culloden,*” followed by the “*Excellent,*” that the weathermost ships of the enemy (which had already bore up and made sail) were stopped, cut off, overwhelmed, and taken.

All the arrangements made by Nelson on his taking the command of the fleet destined to pursue the French expedition against Malta and Egypt, are

equally instructive and remarkable. In the event of meeting the enemy at sea, one-third of the British ships would have attacked and destroyed the convoy, while the remainder engaged the ships of war; and although these expectations were not realized, the application of the same principle evidently led to the skilful and admirable plan of attack on the French fleet in Aboukir Bay, and to a victory more complete and glorious than any one which had previously adorned our naval annals,—but which was gained, not by a mere headlong or irregular attack, but by those scientific and seamen-like arrangements which brought almost the whole of his own force at once into action, against about one-half of the French, anchoring each ship by the stern, and thus securing, at the same time, their own exact position, and avoiding the danger of rounding to under the enemy's fire, from which, under such circumstances, they must have suffered severely.

The two first ships attacked were completely dismasted within a quarter of an hour, and the whole of their van was in our possession, or destroyed, before midnight.

All his subsequent operations bore the impress of the same master mind. The battle of Copenhagen, with all its previous arrangements, and the extraordinary combination of courage, seamanship, and calmness displayed under the most difficult and trying circumstances, should be often and deeply studied by every officer who aspires to imitate this illustrious chief, and his whole remaining career, both while in command in the Mediterranean, and, subsequently,

when pursuing the enemy's fleet to and from the West Indies, cannot be too highly extolled or admired.

And let not those who thus follow step by step this bright and brilliant track to its mournful, but still more glorious termination at Trafalgar, forget to remark, that it was by an unvarying course of kindness and consideration for those under his command—by an open and unreserved communication with them—and by frequently explaining to them all his plans and intentions, that he uniformly gained their warmest attachment, as well as their unbounded confidence and support, that no backwardness was ever imputed to any officer in actions fought under his command, but that his ideas having been thoroughly comprehended and approved by all, were carried into execution by all with a degree of enthusiasm and determination of which our naval history furnishes few former examples: and be it always remembered that the battle of Trafalgar was fought with such perfect skill and science, that before the commencement of the engagement our immortal commander had foreseen, and calculated, the final result with an almost mathematical precision.

We have now, however, arrived at a new era in which steam will, in future, enable naval commanders to conduct their operations and manœuvres on principles still more purely military and scientific. Possessing a portion of their force beyond the influence of wind and weather, they will have it in their power to attack and harass a retreating enemy, or to oppose and check an advancing foe, in a manner hitherto unknown in naval operations; and it is to the mode and

principles on which such operations should hereafter be conducted, that I purpose to devote my remaining observations.

In an Essay of this nature it appears almost unnecessary to dwell on those preliminary formations and manœuvres which hostile fleets approaching each other were formerly accustomed to waste so much time in performing.

I presume that Nelson's principle of engaging the enemy with the least possible delay, will be universally followed; but we must not content ourselves with being mere servile imitators of our illustrious chief, but strive earnestly and unremittingly to catch a spark of his inspiration, and to comprehend his motives, while we attempt to follow his glorious example.

I may, perhaps, be able to illustrate my own ideas on this subject more clearly by sketching the line of conduct which he would have recommended to an officer assuming, at the commencement of a war, the command of a fleet, which we may suppose to consist of twenty-five sail of the line, with the usual proportion of frigates and steam-vessels. As the order of sailing will always be the order of battle, his fleet would be arranged in two lines of nearly equal numbers, with a strong reserve, consisting of five or six of his best and fastest two-deckers, all the frigates not wanted for repeaters, and all the steam-vessels.

In the event of falling in with his enemy in equal force, he would very soon ascertain whether there was any intention of meeting him in battle, or of avoiding an engagement; and in the present temper of the

French navy (more especially if commanded by a young and daring officer), I should be by no means surprised to see them prepare for an immediate and desperate attack, very probably in two columns, in imitation of Lord Nelson.

In this case, which of course supposes the enemy to be to windward, and coming down, the heads of his advancing columns should be engaged at two or three miles (or even a greater distance, if the breeze was fresh and steady) from the main body of the fleet, by the Reserve, formed in close line of battle, until the enemy approached within half a mile, when the whole should bear up together, and continue a constant fire on their leading ships, until, on arriving within about a mile of the main body of the fleet, which by this time would be formed in a compact line, the Reserve would haul either towards the van or the rear, as might be directed, and remain in observation until the exact point of the enemy's intended attack being seen, the movements necessary to defeat it would readily present themselves. It may safely be presumed, that the enemy would have suffered very severely by the fire of the Reserve so posted to receive him; and that his leading ships, if they persevered in their attack, would come into action disabled and discouraged, while their first assailants would probably have received little or no damage, and remain in perfect readiness for another and more decisive attack.

If, on the other hand, his opponent should avoid an engagement, the Commander-in-Chief's line of conduct will obviously be a more simple one; but he should,

nevertheless, be careful that no attack on the enemy's rear be made without a sufficient force at hand to support it, and that single ships did not run the risk of being disabled by getting under the fire of the enemy's line, without any adequate object. A reference to the history of former naval engagements will shew how severely we often suffered from rash and irregular attempts of this description, bravely but unskilfully made, and the danger of these useless and unnecessary displays of personal courage cannot be too strongly insisted on.

Our officers should always bear in mind the golden rule—"that the whole fleet is to act as one ship;" and this invaluable maxim once deeply impressed on their recollections, will equally restrain or stimulate their exertions, as the circumstances of the moment may require.

I will suppose a third case:—Lord Nelson always saw the possibility of applying to naval strategy the military system of a false attack to deceive the enemy as to the real intention of his opponent; and amongst his orders, one will be found containing a sketch of his intentions for practising a feint of this kind in bearing down to the attack. We will imagine the British fleet to windward, and the enemy formed in line to leeward to receive them. I should propose coming down on them in a line abreast, with an apparent intention of every ship engaging its opponent, and then while still out of gun-shot, forming rapidly two columns for the attack of the centre and the rear; the reserve, which had to that moment threatened the van, becoming a

third column, but remaining in observation until the movements of the enemy's unengaged ships decided its further operations. If they tacked or wore, the reserve would in either case place itself between them and the ships engaged, and thus prevent them from assisting their friends, or molesting any of ours which might be disabled or separated, until the result of the grand attack was clearly ascertained, and further measures directed by the Commander-in-Chief.

If, on the other hand, the fleet was formed to receive an enemy coming up astern on the same tack, the reserve would reinforce the rear, and by the superior weight of fire thus brought to bear on the ships advancing, some important advantage might reasonably be anticipated.

In short, on these and every other similar occasion, my object is to impress on the minds of all those who may honour these remarks with any attention, the absolute necessity of acting in strict conformity to the most approved military principles, which are equally applicable to fleets and armies, and which cannot be materially deviated from except at the risk of disaster and defeat.

Can any one doubt, after carefully examining the most authentic accounts of the many indecisive and unsuccessful naval engagements fought between 1778 and 1782, that if our Commanders had kept their ships together in a collected and manageable body, and manœuvred skilfully to gain an advantageous position for attacking before they commenced an en-

gement, that the result of these actions would have been very different? Our misfortunes were clearly imputable much more to our own imperfect and unscientific system than to any particular skill or courage in our opponents, who always stood to a certain degree in awe of us, and never followed up their advantages with vigour or enterprise.

The greatest error a Commander can commit, is to bring his fleet under the enemy's fire before the moment has arrived for making his decisive attack. If he is manœuvring to gain the wind, he may do so without coming into contact with his opponents during the operation, and all history and experience proves, that no naval engagement has been decisive or successful which was commenced when the fleets were crossing on opposite tacks, because some ships were inevitably disabled, and as they could neither be abandoned, or speedily refitted, delay and confusion followed, the action was not renewed, and the French claimed the victory.

Having thus shortly sketched the mode of operation under the most probable contingencies, it appears scarcely necessary to lengthen this Essay by suggestions with respect to circumstances less likely to occur. If my readers comprehend and assent to the great principles I have endeavoured to establish, their own reflections will readily furnish them with those ideas and resources, which more varied and difficult occurrences may frequently demand,—bearing only constantly in mind, that the fundamental rules of war

are unchangeable and invariable, and alike applicable to every operation, however simple and however complicated.

Perhaps it may be thought that an essay of this description is incomplete, if it does not contain some observations on the subject of the proper employment of steam-vessels in great naval operations; and I will therefore add a few brief remarks on this important point.

It has been said, and very truly, that steam vessels will be to a fleet what cavalry and light artillery are to an army; and it is therefore obvious, that they should be handled and used in the same manner. A skilful general will never bring these important arms into action rashly or indiscreetly; and it may be hoped that our naval officers will carefully adopt a similar rule of conduct. It is evident, that although they may be speedily pushed into action, and a great deal of useless cannonading ensue, they can never, unsupported (unless under very peculiar circumstances), make any serious impression on the enemy's line; while, on the other hand, they may themselves receive so much injury in a premature engagement of this description, as to be rendered partially unserviceable before that period of the battle arrives when they might be employed with the most decisive advantage, and for which every good officer will endeavour to reserve them, fresh and entire.

I shall conclude as I began, by earnestly entreating all those who may read these remarks with any interest or attention, to peruse with much more care

and assiduity, the history of that great Commander whose ideas and principles I have, however imperfectly, endeavoured to illustrate,—availing themselves at the same time of the many other most valuable works of naval biography which now place so clearly before our eyes the professional career of Anson, Rodney, Howe, St. Vincent, Collingwood, Saumarez, Exmouth, and many other distinguished officers, from whose example and sentiments so much useful information may be gained,

REMARKS

ON THE

BILL PRESENTED TO PARLIAMENT,

AND READ A FIRST TIME

FOR

IMPROVING THE CONDITION

OF

MASTERS, MATES, AND SEAMEN

IN THE MERCHANT SERVICE.

BY

REAR-ADMIRAL BOWLES, M.P.

London, Oct. 26th, 1849.

MY DEAR SIR,

As your name is on the back of the Bill to which the accompanying suggestions refer, and as the question is one so intimately connected with our Naval interests, you will, I hope, excuse my troubling you with them in the first instance; and if the matter is not in your hands, you will perhaps have the kindness to forward them to Mr. Labouchere, to whom I intimated my intention of offering some remarks on this subject during the recess.

I am, my dear Sir,

Very faithfully yours,

W. BOWLES.

The Right Hon. Sir F. T. Baring, Bt.,
&c. &c. &c.



SUGGESTIONS for the extension and further amendment of the Bill for improving the condition of Masters, Mates, and Seamen in the Merchant Service.

THERE can be no doubt of the beneficial results to which we may confidently look forward in a few years after this law has come into operation, and when under its provisions a superior class of men, well educated and qualified for their situations, shall be established in the command of our Mercantile Marine.

It is equally certain that its enactments will protect our Merchant Seamen from many abuses and impositions which now weigh heavily upon them; but there are still two very material points which have been almost entirely overlooked, and which, if not duly attended to, will after all render this measure much less useful and effective than it would otherwise be.

These are, First, the necessity for the promulgation of a distinct and simple code of offences and punishments at sea, following as nearly as the dif-

ference of circumstances will admit, the language and arrangements of the Act of Parliament under which the Royal Navy has so long been governed, and its order and discipline so successfully maintained and preserved; and, Secondly, the formation of such tribunals in Foreign ports as may take cognizance of, and, if possible, finally arrange and decide, all offences committed on the outward passage, or during the time of the ships remaining in such foreign port.

With respect to the first point, it will be necessary to examine carefully, with a view to their consolidation into one Act, all the statutes which relate to the subject, and which are at present very imperfectly known to those whom they most nearly concern. It is obviously impossible to maintain any rational discipline or subordination, except both those who command and those who are to obey, clearly comprehend their respective powers and duties; and a great proportion of the complaints as well as irregularities in our Merchant Service may be attributed to the absence of such a code as that which I now propose to establish, and which (like our Articles of War in the Royal Navy) should be hung up in some public part of every merchant ship, and always accessible to every one wishing to peruse it.

We have already compressed our Criminal Code within the space of a small octavo volume; there can surely be very little difficulty in following the same course with respect to the various Acts of Parliament scattered throughout our Statute Books

which relate to our Merchant Navy; and offences and their penalties being thus clearly defined, it would only remain to provide for that more speedy and certain inquiry and decision which forms so important a feature in our modern jurisprudence.

Grave and heavy crimes must of course be reserved for our National Courts, but lighter and smaller offences might be at once investigated and disposed of by establishing such tribunals in foreign ports as I am now about to propose, and which I believe when placed under proper regulations (and made reciprocal if it was so desired), no other nation would object to.

All those who have read with any attention those reports from our Consuls abroad on the present character of the British commercial marine, which are contained in the papers presented last year to Parliament, will see that I recommend nothing which these gentlemen do not almost unanimously state to be absolutely necessary, and without which their best efforts can be of very little avail. The powers I would confide to them are already possessed by the Consuls of almost every other maritime nation, and it is to our defective regulations in this respect, and to the absence of a sufficient authority and control over our mercantile navy in foreign ports, that most of the irregularities and discreditable occurrences so fully detailed in these reports are attributable.

I would suggest therefore that on the arrival of all British merchant ships at their foreign port of destination, they should as soon afterwards as possible be visited by the Consul or Vice-Consul, or in their

absence by some Officer of the Royal Navy, whose ship may be lying at the port in question, and the papers being produced and verified, the crew should be mustered, the ship's log-book examined, the list of fines and other punishments inflicted during the voyage publicly read, and if complaints or appeals against the justice or legality of such punishments be made, it shall be the duty of the Consul, or in his absence of any commanding Officer of Her Majesty's ships who may be present, to fix a time and place for the inquiry into the said appeal and complaint, and forming a court of not less than three persons, proceed to investigate and summarily determine the case brought before them, keeping a record of their proceedings, inserting in the ship's log-book any increase or remission of fine or other punishments, and in all important and aggravated cases, especially where either the masters or mates may have misconducted themselves, reporting the particulars to the Board of Trade for the purpose of the investigation directed in clause 20 of this Act.*

I would further suggest that every merchant ship before clearing out for return to England shall be again visited by some of the before named authorities, the crew mustered, the absence of every individual satisfactorily accounted for,† and all complaints up to the day of departure inquired into and decided on—

* All these suggestions were subsequently adopted.

† This precaution is particularly necessary to prevent the too common practice of leaving men behind wilfully at foreign ports, that their wages may become forfeited as deserters.

recording the proceedings in the log-book as before directed.

These proceedings will have a tendency to preserve a constant check over both superiors and inferiors, to deter the Commanders from inflicting any unjust or excessive punishments, and to prove to the seamen that the superintending power of their Government was always at hand as well for their protection, when necessary, as for the preservation of order and discipline.

Perhaps the proposed tribunal (which would be a kind of Petty Sessions), might advantageously consist partly of Naval officers, and partly civilians; but as the Consuls at foreign ports are subordinate in authority to the Commanders of Her Majesty's ships, it would be necessary to define their respective powers in these cases very carefully, to prevent disputes or collisions.

If these suggestions should be thought worthy of attention, a commission might be formed to frame the Code in question, consisting of one or more officers of the Royal Navy, who have commanded on foreign stations, two Masters of experience and good character in the Merchant Service, and the Solicitor of the Admiralty, or some other competent legal adviser; and the same persons, with the assistance of any of Her Majesty's Consuls now in England, might draw up the regulations and form of proceeding for hearing and determining all complaints, and offences committed by British merchant seamen on the High Seas or in foreign ports, which the Act of Parliament placed under their jurisdiction.

I will only add, that having served nearly five years in South America at a period when no recognized Consular authorities existed in that country, and all the duties devolved on the Naval Officer in command, I do not speak without some considerable experience on the subject I am now discussing, and I am able to corroborate by my own testimony all the more important facts contained in the various reports submitted to Parliament last year, and to which I have already referred.

It is deeply to be regretted, that the improvements now contemplated did not precede (or at least accompany) the repeal of the Navigation Laws; and that our commercial marine should not have been more carefully prepared for the great struggle for superiority in which it is now involved with rivals, who, during the last thirty years, have been rapidly advancing in experience and arrangement; but these reflections come too late to be useful, and I will conclude by expressing my earnest hope that the time already lost may warn us of the dangers of further delay.

W. B.

THE END.

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A SELECTION
FROM THE
PUBLIC AND PRIVATE CORRESPONDENCE
OF
VICE-ADM^L LORD COLLINGWOOD;
INTERSPERSED WITH
MEMOIRS OF HIS LIFE.

BY
G. L. NEWNHAM COLLINGWOOD, ESQ., F.R.S.

Illustrated by a Plan of the Battle of Trafalgar, &c.

Extract from the QUARTERLY REVIEW, No. LXXIV.

“ We have been more highly gratified and instructed than we could possibly have expected by the perusal of the history and letters of this noble and gallant officer, whose name, except on one memorable occasion, has never attracted a prominent share of notice among those which belonged to the public characters of his day; and yet his services were of the most important nature, and most ably conducted, at a crisis, too, big with danger, not to England alone, but to all civilized Europe: but the field of action in which he was chiefly engaged, though extensive, was at a distance from home. * * * We once more thank the Editor for his highly-important and very valuable work. It is one which will occupy a permanent place in the English library. * * * The portrait of one English worthy more is now secured to posterity.”

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